MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

CALEPA HEADQUARTERS

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SACRAMENTO, CALIFORNIA

FRIDAY, NOVEMBER 16, 2018 8:34 A.M.

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

APPEARANCES

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Hector De La Torre

Mr. John Eisenhut

Senator Dean Florez

Assembly Member Eduardo Garcia

Supervisor John Gioia

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supervisor Phil Serna

Dr. Alex Sherriffs

Professor Dan Sperling

Ms. Diane Takvorian

STAFF:

Mr. Richard Corey, Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Steve Cliff, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. Emily Wimberger, Chief Economist

Ms. Veronica Eady, Assistant Executive Officer

Ms. La Ronda Bowen, Ombudsman

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

STAFF:

- Mr. Gerhard Achtelik, Manager, Advanced Clean Cars Branch, Emission Compliance, Automotive Regulations and Science Division (ECARS)
- Ms. Barbara Bamberger, Air Pollution Specialist, Program Operations Section, Industrial Strategies Division (ISD)
- Ms. Analisa Bevan, Assistant Division Chief, ECARS
- Mr. Matthew Botill, Branch Chief, Climate Investments Branch, Transportation and Toxics Division (TTD)
- Ms. Mary Jane Coombs, Branch Chief, Project Assessment Branch, ISD
- Ms. Natalya Eagan, Air Pollution Specialist, Climate Investments Policy Section, TTD
- Ms. Jessica Gordon, Senior Attorney, Legal Office
- Mr. Jason Gray, Branch Chief, Climate Change Program Evaluation Branch, ISD
- Mr. David Hults, Assistant Chief Counsel, Legal Office
- Mr. Doug Ito, Assistant Division Chief, TTD
- Ms. Alexandra Kamel, Attorney, Legal Office
- Ms. Elise Keddie, Manager, ZEV Implementation Section, ECARS
- Ms. Cheryl Laskowski, Manager, Climate Investments Policy Section, TTD
- Ms. Shelby Livingston, Staff Air Pollution Specialist, Project Assessment Branch, ISD
- Ms. Cynthia Marvin, Division Chief, TTD
- Mr. Greg Mayeur, Manager Program Operations Section, ISD
- Mr. Gabriel Monroe, Attorney, Legal Office

STAFF:

Ms. Rajinder Sahota, Assistant Division Chief, ISD

Mr. Floyd Vergara, Division Chief, ISD

Mr. Mark Williams, Air Pollution Specialist, ZEV Implementation Section, ECARS

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY:

Mr. Matt Rodriguez, Secretary

ALSO PRESENT:

Mr. Matt Almy, California Department of Finance

Mr. Juan Altamirano, Audubon California

Mr. Lorenzo Andres Vargas Gutierrez, Gobierno del Departamento de Cayeita - Cobabia

Mr. Jose Antonio Montero-Solano, San Cristobol de Las Casas Chiapas, Mexico, Pronatura Sur

Mr. Alfredo Arredondo, Audubon California, California Native Plant Society

Mr. Thomas Ashley, Greenlots

Mr. Dan Barker

Mr. Bud Beebe, California Hydrogen Business Council

Mr. Keali'i Bright, Deputy Secretary, California Natural Resources Agency

Dr. Jonah Busch, Earth Innovation Institute

Ms. Charlotta Chan

Ms. Michelle Chan, Friends of the Earth

Ms. Zoe Cina-Sklar

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

ALSO PRESENT:

- Mr. Josh Cohen, SemaConnect
- Mr. Jeff Conant, Friends of the Earth
- Ms. Ashley Conrad-Saydah, Deputy Secretary, California Environmental Protection Agency
- Ms. Noelle Cremers, California Farm Bureau Federation
- Ms. Maria Dorsey, Idle No More SF
- Dr. Joanna Durbin, Conservation International/CCBA
- Ms. Leslie Durschinger, Terra Global Capital
- Ms. Alison Ehara Brown, Idle No More, Richmond Refiner Town
- Mr. Paul Ehara, Idle No More SF Bay
- Ms. Nancy Feinstein, 1000 Grandmothers
- Mr. Ignacio Fernandez, Southern California Edison
- Mr. Konrad Fisher, Water Climate Trust
- Mr. Tom Goldtooth, Indigenous Environmental Network
- Mr. Eduardo Gonzalez, California State University, Fresno
- Mr. Simeon Grant, Cleantech
- Mr. Sergio Guzman, Asocianda Comunidades Forusta los da Potan, Alianza Mesoamericana de Pueblos y Bosques
- Ms. Barbara Haya
- Mr. Tim Hayden, Yurok Tribe
- Mr. Pedro Hernandez, Leadership Counsel for Justice and Accountability
- Mr. Robert Hrubes, SCS Global

ALSO PRESENT:

Mr. Seth Hubbert, Tech Exchange

Mr. Gary Hughes

Mr. Toby Janson-Smith, VERRA

Mr. Thomas Joseph, Hoopa Valley Tribe

Mr. Nat Keohane, Environmental Defense Fund

Mr. Tom Knox, Valley Clean Air Now

Ms. Jennifer Laughlin, United Nations Development Programme

Ms. Jenny Lester-Moffitt, Undersecretary, California Department of Food and Agriculture

Ms. Alex Leumer, The Nature Conservancy

Mr. Ludovino Lopez, Civil Society

Mr. Robinson Lopez, COICA

Ms. Ana Luz Valadez Ortega, Centro De Estudios para el Cambio en el Campo Mexicano Ceccam

Mr. Jonathan Levy, EVgo

Mr. Bill Magavern, Coalition for Clean Air

Mr. Kevin Maggay, SoCalGas

Mr. David Marvin, Salo Sciences

Mr. Paul Mason, Pacific Forest Trust

Mr. Candido Mezua Salazar, Alianza Mesoamerican de Pueblos y Bosquez, Nacion Embera

Ms. Kathy McAfee

Ms. Magaly Medeiros, Instituto De Mudancas Climaticas - Governor de Acre - Brazil

ALSO PRESENT:

- Ms. Jessica Melton, Pacific Gas & Electric
- Ms. Erica Meta Smith, TERRA
- Mr. Colin Miller, Oakland Climate Action Coalition
- Mr. Chuck Mills, California ReLeaf
- Dr. Amy Moas, Greenpeace
- Ms. Diana Mouri Gonzalez
- Mr. John Nickerson, Climate Action Reserve
- Chief Ninawa Huni Kui, Federacion de Pueblo Huni Kui del Acre
- Mr. Brian Nowicki, Center for Biological Diversity
- Ms. Opal Plant, Idle No More SF Bay & Refinery Communities
- Ms. Tracey Osborne
- Mr. Isaac Osuoka, Social Action
- Ms. Michelle Passero, The Nature Conservancy
- Mr. Giovanni Palazzo, Electrify America
- Ms. Sayda Rodriguez Gomez, Gobierno del Estado de Yucatán
- Ms. Mari Rose Taruc, California Environmental Justice Alliance
- Mr. Rocky Rushing, Coalition for Clean Air
- Mr. Alberto Saldamando
- Mr. Juan Salvador Camacho, Deputy of the Congress of Chiapas
- Mr. Marlon Santi, Nacion Kichwa de Pastaza

ALSO PRESENT:

- Dr. Colleen Scanlan Lyons, Governors' Climate and Forests Task Force
- Mr. Steve Schwartzman, Environmental Defense Fund
- Mr. Thomas Sheehy, Air Conditioning, Heating and Refrigeration Institute
- Mr. David Silberfarb, BTC Power
- Ms. Sister Who Walks with Bear, Grandmothers of the White Buffalo Council
- Ms. Anne Smart, Chargepoint
- Ms. Pamela Tall Lee, International Coalition for Human Rights in Philippines
- Ms. Emily Tibbott, Senior Program Advisor for Environmental Science and Policy, Strategic Growth Council
- Ms. Kimberly Todd, United Nations Development Programme
- Ms. Vedis Vik, Norway's Ministry of Climate and Environment
- Mr. Basilio Velasquez Chi, Producion Comunitaria de la Zona Maya, Quintana Roo, Mexico
- Ms. Chelsea Walterscheid, Sierra Business Council
- Dr. Matthew Warren, Earth Innovation Institute
- Ms. Lauren Whithey
- Ms. Shaye Wolf, Center for Biological Diversity
- Ms. Sunne Wright McPeack, California Technology Fund
- Ms. Isabella Zizi, Idle No More SF Bay, Stand. Earth

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PROCEEDINGS

CHAIR NICHOLS: All right. Good morning, everybody. We're going to start the meeting. And by the time we get to any action item, we will have full quorum with us. We do now. Okay. Great.

So I want to welcome you all to the November 16th 2018 public meeting of the California Air Resources Board. And we will begin with the Pledge of Allegiance to the flag, which is the customary way we start meetings here. So if people will please rise. Thank you.

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

CHAIR NICHOLS: A couple of announcements to make before we get started. We have interpretation services available this morning in both Spanish and Portuguese. We have on the cap-and-trade auction proceeds, sorry only for Spanish, but in Spanish and Portuguese for the tropical forest standards item. And there's headsets available outside the hearing room. And our translator will now read the Span -- read the sentence in Spanish and Portuguese.

(Thereupon the interpreter translated in Spanish and Portuguese)

CHAIR NICHOLS: Thank you.

For safety reasons, I need to make sure everybody

knows that there are emergency exits at the rear of the room. And in the event of a fire alarm, everyone will need to leave the room immediately, and go downstairs, and out of the building until the all-clear signal is given. And then we will return to the hearing room and resume the hearing.

I have to say that I sincerely hope there is not a fire drill today, because being outdoors is not the place you want to be. Yesterday, we had a good warning from our physician Board member John Balmes about that. And I need to make sure that people understand that our advice is that you stay inside the building if you possibly can, and spend as little time as possible outdoors, because the smoke from the fires is very bad.

Anyone who wishes to testify should fill out a request to speak card. They're available in the lobby outside, and they need to be turned into the clerk or the clerk -- Board assistant prior to the item beginning.

Also, we will be imposing a time limit on speakers for each of these. Given the numbers of people who want to speak, dependent on how many there are, it could be either three or two minutes. But for people who need a translator, that time will be doubled, so that the translator has time to also deliver the remarks in their language as well.

So other than that, I think we always tell people that if at all possible, they should put their comments as simply as possible, and to submit written comments for the record.

Okay. So the first item on this morning's agenda is a report, item number 9 -- 18-9-8, which is an update to the Board on California's natural and working lands and their role in the climate change program. This is the first of two items today that are dealing with land related issues. This one we'll discuss what we're doing domestically, and the next item we'll discuss how we can encourage more substantive action globally. California continues to be a leader in climate policy and air quality, putting us on a path to exceeding our 2020 target as well as defining a path to achieve our 2030 goals, and to stay on track for reducing greenhouse gas emissions to avoid the most catastrophic impacts of climate change.

But as we move forward, it becomes clear that we need to be much more active in protecting our natural and working lands as they become an increasingly important part of our climate change strategy.

In September, Governor Brown signed Executive Order B 55-18 committing California to carbon neutrality by 2045 and net negative emissions after that. We are not headed in the right direction on this goal. The latest

IPCC report predicts that we will experience the impacts of climate change sooner than previously thought. And that in order to avoid the worst impacts, we must be carbon neutral no later than 2045.

Both of these goals, or metrics, really point up the need to find a path to zero emissions in all of our energy and industrial sectors, while at the same time we increase our ability to enhance the climate mitigation and resilience of our natural and working lands through technologies, such as carbon capture and sequestration.

Because it takes a long time to change the landscape, action now is critical to achieving the long-term gains that this sector, if we call it that, our natural environment, can provide. So this is a really important update. And I hope it will also provide an opportunity for some discussion and some direction on the part of the Board.

Mr. Corey, would you please introduce this item.

I'm sorry?

CHIEF COUNSEL PETER: Madam Chair, even though this is not action item, I think it might good for the record to take the roll now.

CHAIR NICHOLS: I'm sorry?

CHIEF COUNSEL PETER: The clerk to take the roll

25 now.

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1
             CHAIR NICHOLS: Oh. Yes. Okay. Fine.
 2
             (Laughter.)
3
             CHAIR NICHOLS: But we're here, why do we have to
 4
    take the roll.
             CHIEF COUNSEL PETER: For the video, but for the
5
6
    court reporter.
7
             CHAIR NICHOLS: For the video. Okay. All right.
8
    Fine. Fair enough. Thank you very much, Ms. Peter.
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             Clerk -- Madam Clerk, please call the roll.
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             BOARD CLERK DAVIS: Dr. Balmes?
             Mr. De La Torre?
11
             Mr. Eisenhut?
12
13
             BOARD MEMBER EISENHUT: Here.
14
             BOARD CLERK DAVIS: Senator Florez?
15
             Assembly Member Garcia?
16
             Supervisor Gioia?
17
             BOARD MEMBER GIOIA: Here.
             BOARD CLERK DAVIS: Senator Lara?
18
             Ms. Mitchell?
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20
             BOARD MEMBER MITCHELL: Here.
             BOARD CLERK DAVIS: Mrs. Riordan?
21
             BOARD MEMBER RIORDAN:
22
                                    Here.
23
             BOARD CLERK DAVIS: Supervisor Roberts?
24
             Supervisor Serna?
25
             BOARD MEMBER SERNA: Here.
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1
             BOARD CLERK DAVIS: Dr. Sherriffs?
             BOARD MEMBER SHERRIFFS: Over here again.
 2
 3
             (Laughter.)
 4
             BOARD CLERK DAVIS: Professor Sperling?
 5
             BOARD MEMBER SPERLING: Here.
             BOARD CLERK DAVIS: Ms. Takvorian?
 6
7
             BOARD MEMBER TAKVORIAN:
                                      Here.
             BOARD CLERK DAVIS: Vice Chair Berg?
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9
             VICE CHAIR BERG: Here.
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             BOARD CLERK DAVIS: Chair Nichols?
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             CHAIR NICHOLS: Here.
12
             BOARD CLERK DAVIS: Madam Chair, we have a
13
    quorum.
14
             CHAIR NICHOLS:
                             Thank you. Thanks very much.
15
                    May we now begin, Mr. Corey.
16
             EXECUTIVE OFFICER COREY: Yes.
                                              Thanks, Chair.
17
             As you noted, the '27[SIC] scoping plan update
18
    recognized that our natural and working lands are a
19
    critical component of the State's climate strategy.
20
    scoping plan carries forward the objective of maintaining
21
    California's natural and working lands as a resilient
    carbon sink.
22
23
             We've been working closely with our sister
24
    agencies who are here at the staff table with us today
25
    model potential paths to make our lands more sustainable,
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and to develop an implementation plan describing State actions to make immediate progress on natural and working lands. These efforts are critical as we move to integrate California's land base into our comprehensive climate change response strategy and lay the groundwork for the sector's role in subsequent scoping plan updates.

Since we know natural and working lands will need to play a larger role in our climate policy, we expect to come back to the Board regularly to describe how we're making progress in this sector. Today gives us an opportunity to begin a deeper conversation between the Board, staff, and interested stakeholders.

I'll now ask Shelby Livingston of the Industrial Strategies Division to begin the staff presentation.

Shelby.

(Thereupon an overhead presentation was presented as follows.)

STAFF AIR POLLUTION SPECIALIST LIVINGSTON:

Thank you Richard. And good morning, Chair Nichols and Board members. I'm here today to discuss the importance of natural and working lands to the State's climate strategy and our plan to tackle this challenge.

We're joined today by representatives from our interagency group on natural and working lands. We've worked closely together over the last several years

examining the opportunities and risks to our natural and working lands and how they can contribute to our long-term climate goals.

Joining us today, we have Keali'i E. Bright,
Deputy Secretary for Climate and Energy at the Natural
Resources Agency; Jenny Lester-Moffitt, Undersecretary at
the California Department of Food and Agriculture; Emily
Tibbott, Senior Program Advisor for Environmental,
Science, and Policy at the Strategic Growth Council, and
Ashley Conrad-Saydah, Deputy Secretary for Climate Policy
at the California Environmental Protection Agency.

This item is an informational update on the status of our joint agency effort. We'll describe the natural and working lands, what natural and working lands are, how they can contribute to or impede our efforts to achieve California's climate goals, and our proposed short-term goals and long-term objectives for this sector.

The key message we want to communicate today is that California's natural and working lands play an import -- provide an important opportunity in California's climate strategy.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: So what do we mean when we say natural and working lands?

California's natural and working landscapes cover

approximately 90 percent of California. They include rangelands, forests, wetlands, grasslands, farms, riparian areas, seagrass, and urban green space.

They support multiple benefits from water and air to food, to wildlife, and to recreation. As we plan our climate strategy for natural and working lands, we must balance our efforts on climate with the many other benefits that these lands provide.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON:

California has recognized the importance have natural and working lands in our climate strategy since the first scoping plan in 2008. The latest scoping plan, adopted by the Board in 2017, calls for near-term action to achieve the long-term goal of maintaining our natural and working lands as a net carbon sink.

The Governor has supported these activities with a range of executive orders calling for improved management of the state's forests, actions to enhance biodiversity, and most recently a mandate to achieve carbon neutrality by 2045.

In October this year, the Intergovernmental Panel on Climate Change weighed in noting that dangers to the planet, if temperatures increase more than 1.5 degrees Celsius above pre-industrial levels. In order to keep

temperature rise to less than this, we must achieve carbon neutrality in the 2040 to 2045 time frame.

Since we know that some sectors will have greenhouse gas emissions in 2045, and natural and working lands can be a sink, this highlights the importance of resilient natural and working lands both in California and globally, as you will hear about in the next Board presentation.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: So are California's lands a source or a sink?

Our natural and working lands are on the forefront of climate change, and are often the first to experience its impacts. Historically, our lands have helped regulate our climate by removing carbon dioxide from the atmosphere and storing it as carbon in soil and wood.

In 2014, California's natural and working lands contained and estimated 5.5 billion metric tons of total ecosystem carbon in above- and below-ground biomass and soils. However, the effects of climate change, development pressure and other threats, including the rise of catastrophic wildfire, pests, invasive species, and drought are resulting in our land base being a source of greenhouse gas emissions, rather than the large potential

sink that they could be.

CARB's inventory data indicate that California's lands are losing carbon with a net carbon loss of approximately 170 million metric tons from 2001 to 2014. The majority of these losses are due to wildfire. It's important to note here that these numbers reflect carbon.

To help put this opportunity and risk into perspective, the 170 million metric ton carbon loss from 2001 to 2014 is equivalent to a cumulative 635 million metric ton of CO2 equivalent emissions over the same time frame. For added perspective, this is roughly equivalent to all of the estimated greenhouse gas emission reductions from all of the measures in the 2017 scoping plan.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON:

While this comparison helps to illustrate the magnitude of the potential benefit that these lands can provide, as well as illustrating the risk of inaction, it is important to note here that not all of this carbon is lost -- is emitted into the atmosphere as CO2. Some of this carbon leaves the land, but persists in wood products. And other losses are natural. They are a normal part of ecosystem function. Trees die and fires do happen.

Fire is an integral part and -- is an integral

and natural part of California's landscape, but fire suppression activities in the past century have resulted in a large amount of fuel build up leading to landscapes that are very different from their natural state.

Climate change is exacerbating this problem. In recent years, we've seen unprecedented tree mortality and some of the largest and most destructive wildfires in California's history. Between 20 -- 2010 and 2017, over 129 million trees were killed by wildfire, bark beetles, and drought.

And sadly, this year, we're seeing more of the same. With the Camp Fire and Woolsey Fire ripping through forests, grasslands, chaparral, and farmland destroying homes and businesses and tragically taking precious life.

Like extreme wildfire, land conversion presents a serious threat to California's ability to store carbon. When natural and agricultural lands are transformed to more intensive uses, the sequestration potential of that land is lost.

We are seeing 40,000 acres of farmland lost per year to urbanization. The factors contributing to conversion are many, but notably include drought and development pressures. If we are to depend on agricultural lands for benefits, including carbon storage, it's important that farming and ranching remain robust,

and that rates of conversion are slowed.

We expect to continue to lose carbon from the land base because of climate change, drought, and development. To meet our climate goals, we need a concerted and ambitious effort to change our lands from a net greenhouse gas source to a net carbon sink.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON:

While there are significant risks facing our natural and working lands, there is also significant opportunity.

Several model and research efforts, shown here on this slide, have attempted to quantify the total potential climate benefits we might get from different activities on our natural and working lands. While these efforts have modeled different practices, baselines, assumptions, and have achieved different results, they all point to the untapped potential this sector has to offer.

Our State agency group is also looking at this untapped opportunity. We were looking at a smaller piece, specifically the climate benefit potential of a suite of State-supported activities.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: So what can we do to realize this potential?

For the implementation plan, we are modeling the projected estimated climate impacts and benefits of a suite of land management, restoration, and conservation activities that can change the current trajectory and move the sector closer to net sequestration.

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A sample of the activities this interagency group has explored and modeled are shown on this slide. They include restoration of wetlands, reforestation, forest fuel reduction treatments, less intensive forest management, and agricultural practices -- soil conservation practices such, as adding compost to agricultural and rangelands, reduced tillage, and cover cropping.

Almost all of the activities we are assessing provide both near-term and long-term benefits as indicated -- I'm sorry, they provide both near- and long-term climate benefits as indicated by the upward facing arrows.

Others, specifically forest fuel reduction treatments, involve removing material from our overstocked forests resulting from decades of fire suppression. This activity results in near-term emissions that reduce the potential for catastrophic wildfire, currently the primary cause of carbon loss.

In the long term, these efforts result in

healthier, more resilient forests, as well as significant gains in carbon sequestration.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: For decades, State programs for land management, restoration, and conservation have been implemented for resource management objectives to provide numerous benefits shown on that earlier slide. Other more recent programs have the objective of climate mitigation and adaptation. These separate objectives are not mutually exclusive, and in most cases, they are complementary and synergistic.

For example, the State has committed about 800 million of California's climate investment funds, which is about nine percent of the total greenhouse gas reduction appropriations to date for climate mitigation on natural and working lands. Although only ten percent of these funds have been implemented so far, 172 projects will reduce an estimated 4.3 million metric tons of carbon dioxide equivalents over their project lifetimes, and result in 258,000 acres of land treatment, restoration, and conservation with over 20,000 urban trees planted.

These are also some of the most cost effective greenhouse gas reduction activities with the greenhouse gas -- the Greenhouse Gas Reduction Fund costs as low as \$7 per ton.

Historically, California has been a global leader in public funding for natural and working lands through State bond initiatives as well. Natural resource bonds have funded billions in conservation and restoration work since 2000, Proposition 68 being the most recent voter approved initiative.

With the Natural and Working Lands Implementation Plan, the State is aiming to integrate these two objectives wherever possible, with a more ambitious scope that coordinates all natural and working lands programs under a united approach that will move us towards our combined goal of net sequestration and improved water quality, wildlife habitat, recreation, and other benefits.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON:

Though we already invest in our natural and working lands, we can and must do more. With greater efforts and increased investment, the State needs to at least double the emissions reduction benefits from managing our natural and working lands.

We believe this is an aggressive goal for state-supported land conservation, restoration, and management activities that will move us towards our long-term objective of zero to negative greenhouse gas emissions.

We are looking at at least a five-fold increase in the rate of soil conservation practices, at least doubling the rate of forest management or restoration efforts, at least a tripling -- tripling the rate of reforestation and doubling the rate of wetland and seagrass restoration.

This goal is a statement of ambition informed by input from over 20 State agencies, boards, departments, and conservancies, more than 20 existing natural resource management plans, including the Forest Carbon Plan, as well as input from stakeholders.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: This level of effort will require work across jurisdictional boundaries with activities taking place across all land types and land ownerships, including federal lands. As you can see here, the State owns only three percent of the land in California. Success will require willing landowners, partnerships, innovations in technology, and supporting markets.

In order to achieve these goals, we need to turn all of the dials up: Greenhouse Gas Reduction Funds, bonds, private investment, and new innovative approaches. We can only expand to the scale needed when all parties are all-in.

It is important to reiterate that these activities are narrowly focused on State-supported efforts, and they are only part of the solution. Actions by federal agencies, local jurisdictions, and private entities undertaken, absent State support, are also critically important in making further progress.

These have not been included in this initial efforts, because we don't currently have the systems in place to understand and account for the numerous activities being implemented.

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STAFF AIR POLLUTION SPECIALIST LIVINGSTON: A draft implementation plan, which will serve as a blueprint for how the State can meet the goal for natural and working lands, will be released later this month for public comment, and finalized by the end of the year.

Once final, we will begin to explore how to expand beyond State-supported activities and incorporate federal, regional, local, and private efforts. We will continue to coordinate in the development of quantification approaches, including methods to understand and assess cross-sector interactions.

The implementation plan and continued work will serve as a springboard as we move to further integrate this sector into the next scoping plan update to realize

the significant opportunity for reductions in this sector.

I'm going to now pass the presentation on to our sister agency representatives starting with Keali'i E Bright, Deputy Secretary for Climate and Energy at the Natural Resources Agency.

MR. BRIGHT: Thank you so much. You know, many of my points that I will make are intended to emphasize the presentation by Shelby, because I think that presentation captures most of our -- most of our main key points.

So I wanted to start this morning by giving some acknowledgement to what we are facing at the Natural Resources Agency, and as a State with the fires that we're all watching unfold. You know, as reported out yesterday, we have almost 10,000 firefighters fighting the fires, 12 that are serving on -- over 1,200 fire engines, 121 dozers, 163 hand crews, 124 water tenders, 46 helicopters, numerous firefighters, air tankers from throughout the state, out of state resources from all of our surrounding neighbors in the U.S. and also abroad.

These wind-driven fires have burned moor than 250,000 acres as of yesterday. And I'm sure that number is growing as we speak.

In some places, it's eliminated almost 100 percent of national recreational areas, such as the Santa

Monica Mountains. And up in the north state it's done the damage that we've all been watching in real-time.

So I guess the question is what is happening and what's driving all of this?

We know that the winds -- when the winds come, the winds push the fire, and they accelerate the intensity of the fire. But winds aren't necessarily new to the state. In Northern California, this time of year we usually have higher levels of humidity. We have rain early on. And these winds don't pose the same fire risk that we're experiencing right now.

Right now, the humidity in the Northern

California is at five percent. I think the highest

humidity we're seeing is 15 percent. These are changes in

what we're seeing on the ground and how our state is

experiencing what is usually a windy fall.

Climate science predicted these changes would come, and climate science that we released this year in the fourth assessment is predicting that they will get worse. Our natural ecosystems will have to sustain these changes over time or we will see these impacts worsen as time goes on.

We know these impacts are hitting our -- we watch these impacts hit our conifer forests, and our grasslands, and our chaparral. But we're also seeing these impacts

directly affect our redwood forests, our grasslands, and all of the other ecosystems that we depend on in the state.

Essentially, what we're seeing is all of these ecosystems begin a process of unwinding both -- both in their carbon storing capacity, but also in their ability to provide all of the benefits that we depend on as a state.

So what can we do? And Shelby covered this really well. You know, we, as a state, have taken historic strides in supporting natural resource investment. We've -- we know that land conservation and ecosystem restoration can bring our state's ecosystems back into balance. Aid we know that if we do it at a scale big enough that that work can actually create ecosystems that serve as robust and resilient carbon sinks.

California's legacy of leading the nation in conservation and restoration investments puts us in a pretty good position to greatly expand the acres of reforested forest, urban forest canopy growth, fresh saline wetlands, oak woodlands, and perennial grasslands.

As a state, we've taken tremendous steps forward with Prop 68, as Shelby mentioned, with CCI investments of the prior year -- and the prior years. And also at the

local level, many of our local governments have been passing region-wide initiatives that directly match the funds the State brings to the table and sometimes leads our commitments on investments.

Over the last year, we've been working across this team to better understand what these investments mean, as far as what kind of benefits are we getting from carbon. And we've been working with the Lawrence Berkeley -- with Lawrence Berkeley Labs to develop a model. And a model is just a model. It has its imperfections and it has its qualities, but we -- you know, through this exercise we looked at what would happen if we greatly increased rates of expenditures across all of our existing programs? What would happen if we implemented plans that regions have come together to develop like the Central Valley Joint Venture Plan or the Sierra Nevada Watershed Improvement Plan?

And from that work, we learn one pointed lesson, and it's something that we kind of expected just by, you know, the nature of how -- how nature grows, if you invest now and you invest in large quantities, you start to gain exponentially increasing benefits in carbon sequestration in the out years.

As ecosystems mature, and as they bring in more biomass with that health and with that maturity, those

forests, those wetlands, and those grasslands rapidly shoot up their carbon sequestration potential over time. So really the important takeaway is it's not about sustaining small amounts of expenditures over many, many years, but it's trying to maximize what we can do in the short-term, so that we can have those benefits pay out over the long term.

You know, one of the challenges with the work that we conducted as a team, is that we were -- you know, what we have in front us is a -- is we -- we're -- we chose to base our kind of exercises around what our current programs and our current kind of economies can handle. But if we base our needed action on the performance of prior and existing programs, we don't truly capture what is actually needed to solve the problem.

Currently, California doesn't have the economy of scale -- economies to work at the scale that's needed to achieve all that we need to achieve. We're experiencing this in real time at the Governor's Forest Management Task Force where we're being asked to roll -- to ramp up from programs that are used to spending 10 to 15 to 20 million dollars a year to programs that would now be asked to spend over \$100 million a year.

What this means on the ground, it feels good to pass initiatives to spend that kind of money. But what it

means on the ground is you don't necessarily have the systems, the economies in place to deliver the work that is committed when you make those funding commitments.

Another challenge we have -- you know, and this isn't unique to this sector is that we don't have command and control over all the pieces that Shelby mentioned.

Much of this work needs to occur on lands that the State does not control. Private landowners need to be engaged. Private landowners need to see and have incentives to bring them along, and then they also need to see benefits to their own endeavors from those changes for these practices to sustain over time.

If you ask a -- for example, a farmer in the Delta to transfer current farm of corn, which is producing a certain amount of profit to a wetland that would sequester carbon, you're asking a farmer to make legacy changes to their land, and you're also asking them to take a risk of foregoing future profits from their current operations.

So in that situation, the question really comes down to how can you -- how can you incentivize those landowners who are willing to enter into these practices, how can you make it easy for them to make those choices? And then how can you support them so they don't feel like they're on their own?

And then on the back end, how do you show them the benefits so that they realize the benefits of their investments. I think finally, you know, I just wanted to draw a parallel to another sector that we've been -- we've been pushing really hard on, which is the transportation sector from the beginning.

And just like the transportation sector, we really need to create a new economy around natural and working lands work. We -- if we don't do that, we miss the opportunity to capture the true extent of the carbon sequestration potential, which is one, you know, important piece. But we also run the risk of losing all of the benefits that we take for granted that come from these resources, our clean air, our clean water, our economies that are based around these resources.

And with that new economy, you know, we can deliver to areas of the state that are in great economic need new job programs, new opportunities for residents of impoverished areas. All of this work is extremely valuable to the regional economies. So, you know, what we have here is an opportunity to kind of diversify the benefits of climate programs, not only across all of the resources that we depend on within the state from those places, but we also have an opportunity to diversify the economic benefits across the state to those regions that

have not experienced the benefits of some of these other economies that have developed around these programs.

So I really appreciate your time today, and I will pass it on to Jenny Lester-Moffitt, Undersecretary of Food and Ag.

Thank you.

CHAIR NICHOLS: Thanks.

MS. LESTER-MOFFITT: Thank you, Keali'i.

And good morning, Chair Nichols, members of the Board. It's great to be here today to talk with you about natural and working lands, the work that we, as our interagency group, along with the staff at the -- at your board on your staff have been working on. I recognize that, especially in light of the fires that are currently happening, the immense need that we have to address solutions in our forests that a lot of the conversation today will be on forest management and fires. But I'd like to take a moment to talk about some of the other lands and the potential for our natural and working lands strategy to sequester carbon in our agricultural lands as well.

Californians, as you well know, depend on agricultural land for food, fiber, ecosystem benefits, rural development, jobs, and economic benefits. Yet, those agricultural lands and agriculture is also deeply

affected by climate change as well.

I know this first and foremost as someone who used to run my family's walnut farm. With temperatures changing, with the variation in winter -- what we call, winter chill hours, so a loss of a deep freeze in the winter. That affects many crops throughout the state as far as their ability to bloom and to produce a crop year after year. UC Merced released a report this spring that found that eight out of California's ten major crops are going to be deeply affected by climate change with an expected 10 to 40 percent yield reduction by the end of this century. That includes crops like table grapes, wine grapes, walnuts, almonds, cherries, oranges, the list goes on.

Drought is certainly another impact to agriculture through -- and actually through our whole ecosystem in California and to agriculture as well. We'll begin to see, and we've already seen a 50 percent increase in drought impacts. And the most recent drought we had over half a million acres of ag land that was fallowed because of the drought. This led to billions of dollars of economic impact in agriculture and food production.

Invasive species as well, we'll have more opportunities to grow and proliferate throughout the State. Fortunately, California's farms and ranches also

provide many opportunities to not only combat climate change, but also to continue food for a growing population. This is through soil carbon sequestration and vegetation management. As we talk about fires, certainly -- and I won't talk much about this now, but certainly grazing practices, ranching practices can certainly help reduce fuel reduction in our grasslands, in our woodlands, in our tribe lands.

But there's also other practices that can also sequester carbon within the soils, as Shelby had mentioned, through compost application, mulching, no till, cover crop, different practices that are happening on the farm and ranchlands.

So why soils? Why are soils so important?

Recent study actually that was just published
this year shows globally that soils can sequester 4.8 to
10.6 billion tons of CO2 annually per year. That's a
global number. That's enough to offset 13 to 28 percent
of our current annual greenhouse gas emissions. So soils
alone can offset 13 to 28 percent of our global greenhouse
gas emissions. That's a pretty big and significant
number, all in something that just lies spilling beneath
our feet.

There's also a lot of other benefits to soil management practices in addition to the climate benefits.

Certainly through nutrient management, pest management, through water quality, air quality, I'll name a few. Soils, as they are built and as we build the soil carbon in the soil, they also become full of life. In fact, there are actually more microbes and biota in the soil -- in healthy soil than there are -- in a teaspoon of health soil than there are in the population on earth. So there's a lot of life in that soil. That life in the soil just like how our bodies work and how our guts work, as far as having bacteria in our guts that are helping to digest food and turn that food into the valuable vitamins and nutrients and minerals that we need for our body, the same thing happens in the soil as functioning with plants.

So as we have more biota and life in that soil, as we build that soil carbon, we're also able to cycle nutrients more efficiently. We're also able to manage diseases through -- crop diseases and otherwise through pest management practices because of those soil management practices.

Soils are also very well structured. They act like a sponge. And so as you have healthy soils, they actually have much more structure to them. That helps with dust management, that -- as the soil is much more structured and in form, it's not -- the soil is not blowing off into the air, into the waterways as well. So

there's a lot of water quality, air quality benefits in that as well.

One thing I think is really important, because of that structure of soils, they are much more drought tolerant. Again, think of it like your kitchen sponge. Hopefully, you're letting it dry out on occasion and keeping it safe. And as that sponge fills up with water, it is able to hold the water, and it's able to hold a lot of water in that sponge. Soil does the same thing.

So as they have a higher soil organic matter, higher soil carbon, it acts as sponge and holds that water. It can actually hold 20 times its weight in water. So it helps with a lot of drought management as well.

In addition, there's significant cost savings that can be seen. There's more research that really needs to be done to really better understand the cost savings that might be materialized on farming and operations through soil management practices. But some early studies show that certainly through a reduction of tillage, there's cost savings through fuel, through tractor passes, those sorts of things.

And there could be -- one study shows that there could be a 50 percent reduction in fuel savings. One other thing I wanted to mention is, is the importance of as we talk about our health soils program and the work

that growers are doing, implementing soil management practices, there's a lot of co-benefits with other work that is being done here at your Board and throughout the state in our climate.

Certainly through or Short-Lived Climate

Pollutant Plan, we have organic waste diversion goals. We have manure management goals to really start to -- to take that organic material, compost it, and then through the Healthy Soils Program and through the healthy soils practices, we're able to actually have a market and a place to bring that compost.

So it really works hand-in-hand with a lot of the other work that we're doing through our climate goals here at the state as well. The great news is, as I've mentioned before, there are many practices that can and are being put into place by growers through the healthy soil program that we have at the Department of Food and Agriculture. We've received seven and a half million in the past. We have another 15 million this year. And growers are tapping into that money. They're putting cover crop onto that farming operations, they're putting compost out to onto their range land operations, they're planting perennial habitat along their borders, they're practicing no till.

Many of these practices have already been in

place in many other operations. So what we're really doing is growing and growing the envelope of what we're implementing. So what we propose in this plan that we're before you today is to really have a five-fold increase in the practices that are already taking place in the state. And a lot of that will be through partnerships with landowners.

As we know, building soils -- actually, everything that we do, certainly in what Keali'i talked about with forestry management, it's all about partnerships. So as we build partnerships, as we take the time to really grow those partnerships with landowners, with local governments, with State government, with our federal partners as well, we can really start to see a huge increase in those management practices.

So I think you for your time today. I think it's absolutely valuable that you're hear listening to the work that we're doing on natural and working lands. I certainly look forward to continued work in this. And thank you to you guys for your patience, for your energy, and thank you for -- to the staff who's been working so tirelessly with us on it.

Thank you.

I guess I'll now pass it along to Emily Tibbott with the Strategic Growth Council.

MS. TIBBOTT: Thanks, Jenny. Good morning, Chair Nichols and members of the board. It's really a pleasure to be here today. This Strategic Growth Council's role in the development of the implementation plan has been to consider natural and working lands within the larger picture of land use. Weaving in the urban environment in particular, and to look at the implications of land conversion, not only from the standpoint of carbon sequestration potential, but also from the standpoint of greenhouse gas emissions from land development, namely from vehicle miles traveled, building energy, and a range of other factors.

We began to tease out this cross-sectoral interaction through the use of a model designed to evaluate high level urban land-use scenarios across a range of metrics, including carbon.

Essentially, we compared the model -- the outputs of this model with the natural and working lands model that Keali'i mentioned earlier to begin to address a more complete picture of greenhouse gas benefits to land conservation.

I won't go into the numbers here, as they're illustrative in any case, but I wanted to point out the potential for a more integrated model. To of our programs at the Strategic Growth Council help to address this more

integrated picture. This Sustainable Agricultural Lands
Conservation Program utilizes cap-and-trade funds to
protect agricultural lands on the outskirts of cities from
development. Since its inception in 2015, the program has
protected more than 80,000 acres of agricultural land
through easements, with another set of awards to be
announced soon. This acreage total represents a
significant jump in the rate of state funded agricultural
land protected up to that time.

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And our Affordable Housing and Sustainable

Communities Program encourages Californians to drive less

by funding transit-oriented development among other

things.

Taken together, these programs point to a more holistic vision of land use that creates the kind of carbon reduction outcomes we're looking for.

Looking ahead, I believe that we need a more inte

-- a more strategic approach to land protection, focusing

on efforts that achieve multiple benefits, as mentioned in

the slides. One important benefit should be a focus on

lands most vulnerable to conversion, and that we have

the -- that have the potential to reduce sprawl

development.

For example, we could target the Sustainable Agricultural Lands Conservation Program on areas most

vulnerable to conversion, as well as work to pair this program with the Affordable Housing and Sustainable Communities Program in key geographies.

It also seems extremely important for the State to develop a more integrated model that considers the relationship of carbon abating activities between and across sectors, and ideally across levels of government, as was mentioned earlier.

This larger view will lead to a clearer identification of trade-offs among sectors and could lead to a more innovative and comprehensive policy -- suite of policy solutions. In any case, it's clear that we will need to be creative and far-reaching in the development of a suite of policy and funding interventions that can be applied at all levels of government, as was mentioned earlier.

I want to thank you for your time and for your efforts. And I will now pass it on to my colleague Ashley Conrad-Saydah at CalEPA.

MS. CONRAD-SAYDAH: Thanks Emily. And again, thank you to all the Board members and to all the staff and agencies working on this plan. Really, this is the culmination of I would say six or seven years work together between the forest carbon plan, the natural and working lands implementation plan, multiple executive

orders, and working groups. And it's really also the start of continued work together and increased effort in this space.

So essentially what we're saying here today is the natural and working lands space has a massive opportunity for all of us. It is currently a draw for Californians. Natural and working lands are why people come to this state and stay in this state for our coastlines, for our amazing food, for our wonderful natural resources, for our parks.

But as it's all to visible in front of us, without action, and without increased action that we're talking about today, we don't imagine that California will look like this, and provide these sorts of resources that we all love in the future for our kids, our grandkids, for everyone in this room.

So what we're -- what we're really talking about today is increasing our effort to a level that's commensurate with the effort that we're putting into all the other sectors that we're looking at to help us with climate change.

And the reason we're asking for this, and we're talking about this today is that if you put effort into this space, you cannot not only reduce emissions, you can also sequester carbon and you can prepare those lands and

help adapt them to climate change in the future.

And if you put that effort in, you can actually be rewarded with all of the benefits we've talked about, with public health, with sustainable communities, with good water, with good air, with healthy soils, and with abundant food. So really what we're talking about today is increasing that effort, increasing the personnel, increasing the research, increasing the resources, increasing the activities, increasing the awareness and the education that natural and working lands are not only a part of the solution to climate change and to adaptation, but really critical for this state's future.

So thank you so much to listening to us today, to bringing this area of work into your area of expertise, and to working with us over the coming years to implement the plans that will continue to bring before you over the years to come.

We really appreciate the work together across all of these agencies. I think through my time in the Brown administration, I've built relationships in about 25 different agencies, because climate touches everything. And so we're here today to just talk about how it touches our natural and working lands, and how much opportunity there is for us to continue this work together and make a difference again for generations to come.

So thank you and we look forward to the continued dialogue today and into the future.

CHAIR NICHOLS: Thank you, Ashley. I think that completes the group of our colleagues, then who are here to talk about the work they've been doing. And they have been doing a lot of hard work. I think in terms of context setting, obviously each of the agencies that they represent have a different mission, but they have really come together to try to speak a common language and develop a common approach.

There's a lot more to be done as they've all said, but I think before we discuss this further among ourselves that we should turn to the audience that's here to speak to us today.

So we have a list of people who have signed up who want to address us. It should be up on the board.

Yes. Okay. So our request is that you take a look and see where you are on the line. If you know your name is coming up in the next one or two, that you move down to the front and be prepared. We have microphones on both sides. And so we can hopefully do this fairly expeditiously.

Okay. Thank you.

Mr. Hughes.

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(Thereupon an overhead presentation was

presented as follows.)

MR. HUGHES: All right. Thank you, Chair and members of the Board. My name is Gary Hughes, and I have a short series of slides that I will go through with the objective of providing directors something of a -- okay -- providing you something of a reality check about forest and climate. And I want to start by asking how many directors here have actually been on the ground in an active timber harvest plan.

(Hands raised.)

(Laughter.)

MR. HUGHES: Okay. So the percentages are low.

(Laughter.)

MR. HUGHES: I ask, because the realities on the ground are far more serious than recognized by ARB staff. It is your responsibility as directors to look far beyond what staff are telling you about the land sector, both in California and far beyond.

Aggressive industrial forestry remains common in California permitted by State agencies. These clear cuts on Green Diamond holdings are, believe it or not, certified sustainable by the Forest Stewardship Council. The certification, by the way, provided by a company called SCS Global Services, which is also very involved with lobbying for the California Tropical Forest Standard,

the next agenda item.

Directors need to understand that as in California forest offsets, tropical forest offset projects allow extensive logging.

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MR. HUGHES: Securing climate benefits on the landscape is costly. The pollution from fossil fuels is irreversible. We must directly reduce emissions from all sources. And as you can see under cap and trade, we are losing ground.

(Applause)

MR. HUGHES: Accuracy in carbon accounting is a major concern. Double counting is a serious problem in the natural and working lands element. Also ARB staff failed to emphasize that carbon accounting in the land sector is uncertain. It is nothing more than a statistical estimation with as much as plus or minus 60 percent uncertainty. The State still provides no data on greenhouse gas emissions from logging. And the carbon calculations featured in the Forest Carbon Plan put an inordinate and scientifically dubious amount of value in the harvested wood product carbon sink. Wood products are also a big part of tropical forest offset projects.

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MR. HUGHES: California is host to fiery evolved system -- ecosystems, but industrial activity has negatively impacted fire regimes with cataclysmic results. Our landscapes are not static repositories of carbon. The mere realities of fire ecology expose the flawed science underpinning forest offsets, relying instead on magical thinking that forests are going to scrub the atmosphere of the emissions from burning fossil fuels.

(Fingers snapping.)

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MR. HUGHES: I will leave you then with this last slide, as an understanding of how humans are disturbing global carbon cycles as fundamental to designing effective climate policy. Clearly, we must protect and restore ecosystems and we must, as soon as possible, stop extracting and burning fossil fuels. This is the basic climate science that has not yet been incorporated into California climate policy.

The physics of the planet are what they are. And it is long past time for the directors here to insist that the climate science -- the fundamental climate science is incorporated into policy.

Thank you.

(Applause.)

25 CHAIR NICHOLS: Well done.

MS. CREMERS: Good morning, Chair Nichols and Board members. Noelle Cremers with the California Farm Bureau Federation.

I want to start by talking about forest management. And I appreciate the focus on forest management in the natural and working lands implementation plan. As we all are seeing or not -- just because of the lack of clarity in the air, the impact that our lack of forest management over the past decades is having now in this state. It will take us decades to get out of that and to bring our forests back into our properly managed state, where we don't have the risks of catastrophic wildfires. But I appreciate the State's focus and desire to take the effort to make that work.

There are a lot of things that need to happen, not only just investments in to getting more thinning on the ground, but also working with particularly small landowners and making that happen.

But I wanted to also speak generally about natural and working lands. We appreciate the focus and discussion on this. There are a lot of opportunities for natural and working lands and helping become a carbon sink.

Farmer and ranchers are creative problem solvers in their nature. And we want to -- we want the state to

continue to focus on incentives as the way to partner with them to improve the potential for carbon sequestration on these lands.

When -- so our concern is we don't want to see the implementation plan start as incentive based and move into a regulatory model in the future. When you create a regulation, people will meet that regulation, and you will just come to the level that the regulation requires.

When you partner and work with folks and create incentives, they can go way beyond, because of that creative problem solving nature that they have.

We also think that it's really important to recognize not just the work that's done with State funding. There's a lot of this work that's done 100 percent with private funding. If you look at some of the grazing practices, those are happening and have been happening for years. And so it would be great to capture kind of the baseline of what's happening now in the plan, as well as looking at and making sure that we're capturing investments that are made through private dollars in changing going forward, as well as federal dollars.

So right now, the plan is just looking at kind of state investment. And we know that there's a lot of investment beyond just state investment.

And then the other piece that the conversation

has changed since these discussions began, but I do want to point out the real importance in making sure that we do not discount the costs of development. Urban forestry is really valuable, but let's make sure that we're not forgetting increased vehicle miles, and increased energy when we develop.

Thank you.

CHAIR NICHOLS: Thank you. You're -- thank you. Appreciate that.

MR. HERNANDEZ: Yeah. Good morning, Board. My name is Pedro Hernandez. Actually it's LCJA with Leadership Counsel for Justice and Accountability.

But yeah, I'm here to address a potential issue regarding rural housing and the nexus with this proposed -- or these proposed actions.

A potential concern that our organization has is the emphasis on reduced urbanization, and how that large policy might affect rural communities at the local level. Affordable housing and healthy communities is an issue that reaches out into rural California. And we wanted to make sure that this well-intentioned program, which is designed to reduce the effects of climate change, doesn't exacerbate an existing issue insofar as allowing -- erecting constraints for rural housing.

Furthermore, any constraints that would be

generated from this program would also contradict existing State-grant programs, for example, like Proposition 1, or, you know, the Affordable Housing Sustainabilities

Community Program, which by the spirit of their programs is intended to create sustainable communities.

And so in conclusion, we're hoping to work with the alphabet soup of agencies that are engaged in this plan to avoid that, you know, rural housing is not negatively impacted in the state.

Thank you.

CHAIR NICHOLS: Thank you.

MR. NOWICKI: Good morning. I'm Brian Nowicki with the Center for Biological Diversity. It's good to see you all. I've been following this effort actually since 2008, since the first FCAT when this got -- when this got started in different forms.

I am looking forward to seeing the implementation plan. We don't see that yet, as you know. But once we have that draft in front of us we'll be able to offer more substantive comments.

I will say a few general things here though, and that is we needed this effort. This is something that we needed to start getting a handle on the scope of some of these issues, the scope of some of these numbers, and starting to get an idea of where they are. It was also

necessary, in many ways, to show the agencies have the -put the agencies in a room and have them learn how to
start working together in a way that actually results in
regulatory actions, and that can come up with actions that
can come before the Board.

We expect a lot of good work and good efforts to come out in the implementation plan. That said, it is critical, at this point, to understand the limitations of the model and the process that we're currently working with. And it's very dangerous to misunderstand its ability to draw direct connections between actions on the ground and what the climate impacts would be.

I want to give just one example here today about the model, as I understand it, that -- the CALAND model that helped to lead to this effort, and that is because of the regional approach that aggregates the actions happening in an area, you can have 10,000 acres of, let's say, fuels reduction thinning occurring in that area. And because of the aggregate nature of the model, it assumes that those 10,000 acres of reduction -- fuels reduction thinning had an effect on subsequent 10,000 acres of fire.

It does not require that the fires actually happened in the same area that your fuels reduction happened. There is a disconnect to that, because you're aggregating for the entirety of the area in there.

So there are these problems with drawing those direct connections. And those are the types of problems that very much came to mind when we heard Keali'i say that, you know, there's going to be challenges in figuring out how to move these extra hundreds of millions of dollars through a system to make sure they're getting into the places where we can see results and that we can get something out of it for the climate and for what's happening on the ground. So that's an issue that we're going to have to still struggle with.

One last thing that I think you're going to be hearing quite a bit from the folks coming up in the next -- in this next item on the agenda, and that is the irony of having a tropical forest standard that contemplates moving resources out of California into a -- into tropical forests when we heard from staff, and we know very well that we in California are still seeing losses of forest due to development, losses of natural lands due to development and sprawl, and forest degradation.

Thank you very much.

(Applause.)

CHAIR NICHOLS: Thanks, Brian.

MR. CONANT: Is the mic on?

Yes.

Madam Chair, Members of the Board, I am Jeff
Conant with Friends of the Earth. I want to say I agree
with the comments of my colleague. And I want to just
acknowledge that we're all in a state of deep grief for
our natural lands today.

(Fingers snapping.)

MR. CONANT: And I want to contribute four points to this discussion. One the mention of carbon sequestration and storage, there is no proven existing technology for carbon capture and storage at scale. And this should be categorically excluded from any of California's climate mitigation options.

Another that wasn't mentioned, but I believe is part of the natural and working lands approach, is biomass harvesting and biomass energy. Biomass energy is not carbon neutral, and can drive undue damage to both the climate and to forests as well as to public health. If California wants to protect natural and working lands, California should categorically exclude biomass energy from the State's energy mix.

Third, I want to say while well-stewarded lands do play an important role in sequestering CO2, monetizing and trading the carbon sequestration capacity of land, as others have already stated, in order to offset industrial emissions is a perverse approach that benefits no one but

the financial interests involved in the offsets trade.

Yes, good management practices should be incentivized by subsidies and by tax measures, not through carbon offsets. Offsets pollute.

Finally, as it currently stands, California's approach to natural and working lands, as we've heard, allows for clear cutting and which is obviously the single worst thing you can do to a forest. It also allows extremely perversely for carbon sequestration in harvested wood products. That is lumber.

This is grossly absurd and needs to be addressed. California needs to base its policies on reality and above all on a fundamental understanding of and respect for local ecologies.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

MR. MASON: Good morning, Madam Chair, members of the Board. Paul Mason with Pacific Forest Trust.

I want to start by thanking the staff for such a thorough and clear presentation. It actually made me throw away most of my existing talking points.

(Laughter.)

MR. MASON: I also want to thank, and I appreciate the Chair's opening remarks as well, which

again were not helpful for my talking points.

(Laughter.)

MR. MASON: And I want to thank the staff, ARB in particular --

CHAIR NICHOLS: I'll coordinate then next time.

MR. MASON: -- for digging into this issue, because natural and working lands, as the presentation outlined, is tremendously significant in terms of our climate challenge. But it's also tremendously complicated. And for an agency that is extremely good at regulating point sources, it's a different challenge, and it's a lot more frankly complicated with a lot more interacting factors, both physical, biological, and economic.

And so I really appreciate the work that's gone into it by all of the staff. I will say that I'm not a huge fan of natural and working lands as the category that we're talking about. I mean this is the world that we live in, or as the Chair might say the real world.

(Laughter.)

MR. MASON: And I think it's important that we remember that. It's not just an abstract category. It's where we live, and it's a place where climate change is showing disproportionate impact. You know, the sea level may have increased by fractions of an inch in the last few

years. But the changes in precipitation extent and timing have really manifested in very different impacts in the forest, whether it's large scale mortality in the drought or in more extreme fire behavior.

And we're going to continue to see that both in the forest context, in agriculture with the loss of chilling hours. And that's going to have enormous impacts that are going to really come crashing down on us. And that's where I think it's really clear we need a more transformational approach to what we're doing in natural and working lands to address our climate challenges.

The way we've approached it so far has been let's take our existing programs and turn it up to 11 or 12, and really try and, you know, do as much as we can in our existing framework. That's not going to be adequate.

I really think the better analogy is to look at what we've done with cars. You know, we -- ARB has been fantastic at saying, okay, you know, we're going to take our old polluting cars and make them cleaner. We're going to make them cleaner. We're going to increase miles per gallon to 20, to 30, to 45. And at some point, we said, no, that's just not going to get us where we need to go. We're going to set a really aggressive goal of five million electric cars in the next 12 years and transform that entire way that we get around.

And I think we need a similar approach to addressing our natural and working lands challenges, and taking a second look at how we're working with landowners, how we're making these changes on the ground, so that our mechanisms are more nimble, that we're able to get to scale faster. Because right now you look at where we are on natural and working lands we're losing. We're losing enormous amounts of carbon. We're losing lives. We're losing forests and watershed values. We need to do things differently and think a lot bigger than we have before. And we really look to ARB to help drive that conversation.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

MS. PASSERO: Thank you. Michelle Passero with The Nature Conservancy. And I'll echo Paul's comments, and also say that this is my fifth iteration of talking points since a lot of the staff and everyone have really done a great job of really highlighting this problem. And we do appreciate shining a spotlight on this issue.

So over the past year The Nature Conservancy with a lot of our scientific colleagues, we've published three different analyses looking at what does business as usual look like for the state's natural and working lands, and what is the reduction potential?

And what we found is that we can't afford not to act. If we look outside, this is just more evidence of that. And then absent any intervention, we face our natural and working lands becoming an increasing net source of emissions.

On the other hand, if we are ambitious as Paul and staff have said and we act now, that we can actually bend this curve, and we can restore systems to be a net sink. And this is what we've been finding through our different analyses.

This can take the form of changes in forest management or land management, restoration, and conservation across our landscapes whether we're talking from rural all the way to urban -- urban areas.

And this doesn't even get into all the other co-benefits for which we value our natural and working lands. To do this, we do need to be ambitious and aspirational. And like all others have said, it needs to be on the level like we are with the other sectors. So we appreciate your leadership. We're here to both push you and support you moving forward, and we just would like to reiterate just being very ambitious and innovative in this area. Thank you.

CHAIR NICHOLS: Thank you, Michelle.

If they next couple of speakers could also come

down and be ready, I'd appreciate it.

Okay.

MR. ALTAMIRANO: Good morning.

Good morning. Thank you so much for allowing me to speak here today. My name is Juan Altamirano. I'm with Audubon California. As you've heard from staff and from my colleagues previously, this is an important area that we feel like we need to concentrate and have bold ambitions to set a target that allows us to get to a place that we not only are getting to our carbon tar -- carbon goals here -- set in California, but also ensure that we have the ability to enjoy our natural and working lands in a triple benefit level, right, from adaptation to carbon sequestration, and to biodiversity.

The best time to have started the fight against climate change was about 20 years ago. The second best time is now. We know already how to bring carbon back to the earth from smart land management to continued investments in these natural and working lands. Nature already soaks up almost one-third of the carbon that we emit.

Nature has also already covered the planet in CO2 absorbers. And they've been removing greenhouse gases from the atmosphere for millennia. And that is why we, Audubon California, supports a goal -- a bold goal in

setting a target for this sector that is ambitious and that is aspirational that we can work towards in achieving.

Thank you.

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CHAIR NICHOLS: Okay.

MR. ARREDONDO: Good morning, Madam Chair and members of the Board. Alfredo Arredondo on behalf of the California Native Plant Society. My handwriting is terrible, so I don't hold anybody against misspelling the name there.

(Laughter.)

MR. ARREDONDO: Although, Alfuedo does sound like a really interesting name.

(Laughter.)

MR. ARREDONDO: (Coughing.) Excuse me.

I'd also like to align our -- (coughing.) -- there must be some smoke in the air.

(Laughter.)

MR ARREDONDO: It's really go -- excuse me -- align my comments with those from The Nature Conservancy, Pacific Forest Trust, and Audubon California. Really appreciate staff's tireless work on this effort, and looking forward to seeing what's still to come. As it relates to the ambitiousness and the desire to see a really aspirational target, you know, a lot of that is

contextualized in many ways by the recent Executive Order on carbon neutrality that was issued by the Governor over in September.

And we would also like to highlight though that three days prior to that Executive Order, another EO came through specifically focused on biodiversity preservation in California, and really setting a marker for how California needs to continue to think about its biodiversity, both in native plant communities as well as wildlife.

And one of the reasons why California is such an awesome state to be in is because of the unique biodiversity on the global scale that exists and inhabits the state.

And so for that reason, I really wanted to highlight the need to -- as we move forward with really ambitious targets, and really ambitious work, and continuing to make all these investments in our natural and working lands really wanting to emphasize looking at that -- that initiative -- the Executive Order, I should say, and the initiative that was released alongside it, which provides a roadmap, an outline, a blueprint, if you bill, about how we can achieve really good critical steps which, you know, begins with baseline, understanding what's out there, getting really good data on what's on

the ground now, protecting what is there, and then managing and adapting the management tools that we do have to continue to ensure that as these discussions, and the impacts of the climate change make biodiversity conservation more difficult, we're -- we will be ready to stand up and be there for the protection of our biodiversity in California.

Really appreciate again all of your time, and we'll be happy to continue to work with the Board as this moves forward.

Thank you.

CHAIR NICHOLS: Thank you.

MR. MILLS: Good morning, Madam Chair and members of the Board. Chuck Mills with California ReLeaf. And, yeah, because of the outstanding presentation from the staff in front of us today, I also had to throw out most of Paul's comments.

So I will just say that we do seek ambitious targets, align my comments with certainly Pacific Forest Trust, Nature Conservancy, Audubon California, and, of course, Alfuedo.

(Laughter.)

MR. MILLS: And just look forward to further discussion, and close by saying that surprisingly I get to align with the very narrow comment from Farm Bureau is

that urban forests are very important.

Thank you.

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(Laughter.)

CHAIR NICHOLS: Great. Well, there's actually a pretty large degree of consensus around these issues. Before turning this over to my colleagues, I want to say a couple of things. And I'm hoping that we can, you know, clarify and give some more specific direction to the staff of all the agencies, including those that don't work for us, but are part of the team, about where the Air Resources Board is going in this issue, because due to the carbon neutral executive order, we are embarking on a new scoping plan. And it is clear that we need to do something, as many people have said, that is much more focused and much more ambitious than anything that we've ever done before as a state to address the crisis with our landscape, what we have done to nature and what we need to do.

I agree with the gentleman who spoke of the grief that people are feeling today. There is a pall hanging over us. And it's a physical pall of smoke, as well as the knowledge of the harm that has been done to so many people, so many communities, so much of our State's identity as a result of this current set of fires. And yet, even so, because we're Californians, we also have

this somewhat ridiculous optimism that we can solve problems, and survive crises, and do better, because we have a history of having done that.

And the Air Resources Board's role in all of this as the agency that's responsible for putting together the plan, for achieving our carbon goals, was chosen I think very deliberately by the Legislature in recognition of the fact that the approach that we've taken in the past, as a result of federal and State law, is one that ought to be applied to this horrific problem of climate change, which is to look at what needs to be done, that is look at what the earth needs, look at the goals, set very big goals that are based on that science, and then develop a plan for how to get there.

And this has really not ever been the practice in our work with our own State's landscapes for a variety of reasons, different ownerships, different history of how we have dealt with it, fear frankly of what it might cost to actually repair some of the damage that's been done in the past, fear of what may happen in the future as a result of climate change and how costly that's going to be to deal with as well.

We cannot let that stop us from looking at the situation with clear eyes, and coming up with an approach, even if we're not prepared to address all the choices,

because we don't have the power, or we don't have the ability ourselves to say, go do this. We need to at least say we could do this, or we could do that, or we could do some of both, but we have to do something. And right now, we're not yet at that stage when it comes to having an implementation plan.

So I heard in the comments of many people a couple of common threads. And this is really emerging I think from what -- the work that the agencies have done as well. One is that we have to take a much bigger look at what's truly possible from our natural lands, in terms of storing and capturing carbon. We need to look at that in conjunction with technology ideas that are out there, not to put them off the table and say, no, we will not consider any of the ideas that people are working on to capture carbon that's already in the air or find new ways to use it, even though those are not strictly related to the landscape itself.

It shouldn't have to be a choice of one or the other. We probably are going to need both, just like we deed regulation and incentives, and like we need taxes and cap and trade. You know, we really have to look at everything, because the problem is that -- that big. And we have to be prepared to look at a price tag that could be much bigger than anything that we've ever spent before,

but then say, okay, does the State have to come up with all this money, or are there financial tools that we could use that could help us to get to where we need to go.

And how do we get a bigger bang for our buck, especially starting quickly? Because we certainly are seeing and being told that if we don't do a lot of work on our forests as they are today, they will continue to be a big source, and not in any condition to be restored to really serving their function as a carbon storage.

So I think we need to thank the people who've been involved to date, but send them back out and ask them to come back pretty soon, like, you know, not in another year, but at least in a few months with a bigger, bolder plan for what to do, and certainly to, you know, keep on being transparent and talking to stakeholders as well.

But recognizing that it did take us a long time to get to the place where we are right now, and it's not going to be quick, or easy, or one -- or that there's only going to be one path that will get us to where we need to go.

So I know everybody on this -- on this Board has some experience and background in this area. I speak from my history of frustration having been the Secretary for the Natural Resources Agency back when it was only called the Resources Agency. And we used to sort of complain

about how people thought that meant we must have money to spend, and --

(Laughter.)

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CHAIR NICHOLS: -- that was far from -- far from true. But, you know, there's -- I think we have learned a lot, unfortunately, not all of it good recently, about the condition of our landscapes and the -- what the need to take much bigger action than we have before.

So I welcome any additional thoughts or comments from Board members who might want to weigh-in at this point, if anybody feels the need, desire? You -- starting with our Vice Chair.

VICE CHAIR BERG: Thank you, Chair.

I would just like to add on the fact that I did appreciate Mr. Hughes question about actually being on the ground and understanding. And so maybe one of the other things is also more resources for, I'll say, people like me to get up to speed as to what is going on the ground. I really appreciated each and every one of our sister agencies coming out. I learned quite a bit, and thank you for that.

CHAIR NICHOLS: Field trip. I see a field trip in the future.

(Laughter.)

CHAIR NICHOLS: That's great.

Ms. Mitchell.

BOARD MEMBER MITCHELL: I want to thank staff and, in particular, the sister agencies, because this is an issue that goes across all of our agencies. I think it's really important that we're working together on this.

The other thing that's striking is that when we talk about what we control, only three percent of the lands in the State of California are lands under the State control. We're looking at 48 percent under federal control. Are we doing anything? Can we do anything to bring the federal group in with us to work on this problem?

MS. CONRAD-SAYDAH: So I can get started. We are. So we have something called good neighbor authority to work with the U.S. Forest Service to share resources and do management activity across federal lands and State lands. And so we've been actively working on those good neighbor agreements, in particular the Tahoe Central Sierra Initiative is an area where there's 2.4 million acres that the federal government and the State government, via the Sierra Nevada Conservancy, are working together on implementation in that space.

So that's one area where there's a really great model, and we'd like to try to replicate that model in other areas of the state. But as you correctly note, we

don't have full control over that space. We can do the work, but we need more -- we need more embedded understanding, I would say, within the federal agencies to work with us on longer term management for the landscapes within our borders as well.

And Keali'i, you probably -- do you want to talk a little bit about the MOU at all between Forest Service and John Laird.

MR. BRIGHT: So you know just reiterating -- and again this Keali'i Bright from the Natural Resources
Agency, reiterating Ashley's points.

We actually have really, really good relationships with the U.S. Forest Service across most of our forested lands. And we have strong partnerships with them in many of the model initiatives that we're trying to replicate statewide. So this is an area where we should expand on the current model, not try to change the structure of it.

We're also -- you know, what we're seeing on the ground is happening faster than our science has predicted, and this is also happening across other regions as well, not only in California, but Oregon, Washington, British Columbia, you know, our friends in Latin America, Indonesia, everywhere else. And we're all trying to learn from each other on how to catch up.

Next week, we're going to be entering into a Secretary MOU -- level MOU with Washington and British Columbia -- hopefully, Oregon will come on soon thereafter -- for a west coast unified approach to try to organize ourselves in a way that actually kind of provides a regional response bigger than California. We're excited for that progress.

BOARD MEMBER MITCHELL: And I will say that we -we can't sit here and do nothing. It's obvious we have to
do something. We have to act. And we might make mistakes
as we're entering into this field, because we haven't done
this before. But I think while we make mistakes, we learn
from them, and then we go on from there.

I was recently near Yosemite, where the Ferguson Fire burned last summer, and had a tour of the forests in that area. There are 129 million dead trees in that area. There's -- and we don't even have the capacity to cut and take them out.

Those will sometime burn. And that lumber isn't usable, maybe for sawdust, but it can't be used for construction. It's destroyed from the inside of the tree.

So that's one aspect of what we're dealing with.

And now we're seeing these last few days, these terrible

fires that are mega fires infernos. And that just draws

our attention more to the fact that we have to act, and we

have to be ambitious, and we have to start now. We can't sit on this. We have to work together to get this job done. I'm looking forward to seeing the plan and getting it implemented. So thanks for all your work on this.

CHAIR NICHOLS: Other Board members?
Yes, Barbara.

BOARD MEMBER RIORDAN: Just a challenge to those of you who are working on our plans. I want to pick up a little bit on the Farm Bureau. And I think the incentives are very, very important. And having had some experience from farming point of view, incentives go a long way to getting people to act. And it's amazing what will happen if the Government can step in and provide some money, in some cases.

And maybe there are some other things that creative people can create to incentivize very good practices of conservation, as well as rangeland, which I don't have as much experience, but I would believe that there are some opportunities there. And to understand the -- a little bit different topic, the forests are -- set out some very clear opportunities for us to become involved with.

There's a chaparral category of land that burns, and seems to burn quite often. And I'm thinking we should think about what do we do with this chaparral land,

because I think it's -- it's a part of the conversation as well.

CHAIR NICHOLS: And it's a key ecosystem for California.

BOARD MEMBER RIORDAN: Yeah. Yeah. And there are different things that have to happen there. And I'm not sure what it is, but I understand and watch it burn so often. And it's probably the urban interface that occurs there. And so you have many challenges ahead of you. But I would concentrate on those incentives. I think that's an opportunity for all of us.

CHAIR NICHOLS: Mr. Eisenhut.

BOARD MEMBER EISENHUT: Thank your Chair Nichols. I debated about this, because this is, in part, a personal comment. I am the owner of a small forest urban interface piece of property, who recently had a fairly negative experience with the timber harvest plan. And I understand that the Legislature and the Governor have worked to impart remediate this barrier to cleaning up private land holdings with 901.

And so I would encourage the implementing agencies of AB 901 to be very attentive to that work, because I think at the very least, we can take some action without incentives, without cost that enable small private landowners to take positive action.

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CHAIR NICHOLS: Yes. Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: Thank you. Staff, thank you very much.

Usually, we thank the staff for bringing all this diversity together and having a unified response and support. And today is a little different. I would thank you for bringing out the passion and, you know, the diversity of opinions about what's going on, and how we're proceeding.

I would also point out great comments about -from everyone about how important this is, both in terms
of immediate health effects, as we think about wildfires,
as we think about long-term effects in terms of the
concern we all share about the impact of climate change.

But this is very different work than we usually do. We're -- we're used to working primarily with mechanical things. And a simple input and the analogy of the history -- you know, the gasoline goes in, and the emissions come out. Well, in fact, we've gotten a little more sophisticated about that, and we're trying to understand the full lifecycle of gasoline and so on.

But this is biological systems. We are delving into biological systems here, which are much more complex. And the more we learn about them, the more complex they

are.

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Discussion of the gut biome. What did we -nobody was talking about a gut biome 20 years ago, 10
years ago. And we are discovering how critically
important that is to our health, not just nutritionally,
but in terms of our immunologic system, and so many ways
that we never would have imagined.

So critically important. Although, lots of noise that may not sound very supportive, yes, I think people are --

(Laughter.)

BOARD MEMBER SHERRIFFS: -- on the same page in terms of where we're trying to get. And so it's a real challenge bringing agencies together, but that's -- that's the added complexity we have to bring to this to solve this very complex problem, or at least come up with better solutions.

And again, we'll come up with something better in a year, and the next year, and the next year, and the next year. And we will make plenty of mistakes along the way. We need to be prepared for that, but we shouldn't delay. So I hope we're going to get the final implementation plan next week --

(Laughter.)

BOARD MEMBER SHERRIFFS: -- and then we can

improve on it in the future.

CHAIR NICHOLS: Okay. I think we should probably bring this to a close. We don't have any action item in front of us, but I think you've all heard the message, faster, bigger, more ambitious, no fear of disclosing what we know and what we don't know, willingness to confront it, and figure out how we're going to ask for what we need, and take those actions that will get us the biggest bang for our buck.

I do want to say one other thing maybe as part of the transition from this item to the next, which is first speaker -- I hope I'm not being defensive here -- but, you know, we talk about natural and working lands as a sector sometimes. And when we use that term, I agree, it's kind of inappropriate. But the term sector, I think, comes from the pie chart that you draw of the tons that you're trying to get. And then you take those pies slices that are sectors and you figure out what you're going to do about each of them.

And in this case, I think there may be a sense on the part of folks who primarily work in the area of land and natural resources that not enough is going on to deal with the real problem, in terms of energy use, petroleum use, the emissions side of what ARB does, along with some of our other sister agencies.

And so I just want to ask, you know, in return for asking us to take a look at timber harvest plans and what's going on on the ground, if you would all take a look at what already is going on here, in terms of reducing emissions from fuels, from vehicles, the monies that we've spent, which are in the hundreds of millions of dollars in terms of turnover of our fleet, the money that the Strategic Growth Council is now spending coming out of the California cap-and-trade money, primarily to assist low-income and disadvantaged communities with projects that reduce the need for driving at all.

And to -- not to say it's all as good as it should be or as much as it needs to be, because that would not be true, but to understand that this sector, as we call it, is one part of a much larger and more diverse plan. And that it's not that we're just ignoring it, it's just that for today, for the moment, we're focusing on something that needs to be focused on and hasn't received enough attention.

So with that, let's change positions as we need to and move on to the next presentation, which is called the California Tropical Forest Standard.

Get a new crew here. Thank you very much all who came from other agencies.

Okay. So as was recently emphasized, by the

Intergovernmental Panel on Climate Change, otherwise known the IPCC -- yes sorry.

Closer. Can you hear me now?

Is that better.

Okay. Thank you.

As was recently emphasized in the Intergovernmental Panel on Climate Change Special Report on Global Warming addressing climate change requires a comprehensive look at all sources of greenhouse gas emissions, one of the most studied sectors where mitigation actions have long been proposed is tropical forests.

estimated to account for between 11 and 14 percent of all global greenhouse gas emissions, which is more than the emissions from all cars, trucks, and ships in the world. Forest mitigation actions could account for as much as 50 percent of the goals that were agreed to in the Paris agreement.

But there's a connection here to California.

Research has pointed to reduced snowpack in California as one potential result of widespread deforestation in the Amazon. California has a reputation internationally of technical rigor in our climate work. And because of this, the California Tropical Forest Standard is one of the most

significant actions that California can take to establish a credible and robust standard to address tropical deforestation.

In and of itself, the standard does nothing other than provide an accounting mechanism. But obviously, there's fear on the part of many people that it will have other consequences and we need to listen to them and we need to engage in this conversation.

The standard that's before us would increase the rigor that is currently out there in subnational and national programs around the world raising confidence, not only in any resulting emissions reductions that are claimed, but also in the ability of companies that work in this field to more sustainably source materials and of jurisdictions to participate in payment for ecosystem services programs.

So as you've heard, California has to focus on. We must focus on our own lands, but the Board has also recognized for years now, and indeed our original climate legislation, AB 32 told us that we needed to engage internationally in supporting activities around the world that will be crucial to addressing climate change.

First, during the adoption of our initial scoping plan in 2008 and in every subsequent iteration of the scoping plan, there has been an element of discussion of

the relationship between California's program and international programs.

Our staff have been working on the development of a Tropical Forest Standard for over a decade. These efforts included discussions of key provisions from the United Nations and other international bodies, such as the world banks, Forest Carbon Partnership Facility, tropical states and provinces, indigenous peoples, and local communities, and organizations that work in the area of voluntary carbon markets.

We expect that this standard will serve as a launching point for other jurisdictions, and programs, and communities, and companies to move forward on addressing this major source of emissions.

Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks, Chair.

And as noted, staff is proposing that the Board consider for endorsement the Tropical Forest Standard.

And California's been participating in the Governors'

Climate and Forests Task Force, a collaboration -- or rather international group of 38 states and provinces. It was founded in 2008, and it focuses on promoting cooperation between jurisdictions, indigenous peoples, and local communities on efforts to reduce emissions from tropical deforestation.

We've had five public workshops beginning in July of 2010 through 2016 to develop a workable standard and to continue to engage the topic every year through the GCF Task Force process and meetings.

These forums provided the opportunities for stakeholders and staff to discuss the program's scope, setting reference levels and crediting baselines, permanence, reversals, leakage, monitoring, reporting, verification, credit tracking, and social and environmental safeguards.

Staff has utilized the information and experience from the GCF from expert working groups, and stakeholder input during the development of the standard.

The standard is truly a first of its kind. It combines a focus on increased rigor, transparency, accountability, and benefits sharing, as well as leveraging the ongoing efforts in the United Nations process. It should be noted that special attention was paid to the incorporation of social and environmental safeguards that build on international best practice principles, criteria, and indicators into the standard.

Safeguards ensure that any implementing jurisdiction has the robust consultation, public participation, and participatory management requirements with local and indigenous communities.

The California Tropical Forest Standard serves as an actionable model that we expect will bolster discussions and action within other venues within the United Nations, as well as other international dialogues.

With that, I'll ask Barbara Bamberger to give the staff presentation.

Barbara.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST BAMBERGER: Thank you, Mr. Corey.

I will start by relaying the importance of today's vote on this item, explaining the context for California, the process for development of the California Tropical Forest Standards, and the importance of forests to California's climate efforts. I will then discuss the development and critical concepts of the standard with a special focus on the social and environmental safeguards it establishes to protect the rights of forest-dependent communities, including indigenous peoples.

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AIR POLLUTION SPECIALIST BAMBERGER: We are proposing this item for your consideration pursuant to AB 32, which directs us to assess in-state, national, and international sources of greenhouse gas emissions and to

develop integrated programs to assess these emission sources.

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The world is losing one of the most important carbon sinks. Research has tied this loss of tropical forests to potential adverse impacts to California's Sierra snowpack. Building off of many years of work and Governor Brown's Global Climate Action Summit, CARB is in a unique leadership position to influence international action to slow the loss of tropical deforestation today.

This standard would serve as the most rigorous set of criteria to help support policy innovation, create new incentives for jurisdictions that are fighting the loss of tropical forests, and most importantly it reflects the progress made in fostering strong partnerships between tropical forest governance, governments, and indigenous peoples.

A vote to endorse the standard will send a strong and necessary signal to spur immediate action and to provide alternatives that keep forests intact.

Endorsing the standard does not pre-suppose any future Board action of the standard, including any action to accept tropical forest offsets in California's Cap-and-Trade Program.

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AIR POLLUTION SPECIALIST BAMBERGER: But first,

let's take a step back for a moment and assess the climate goals we have set for ourselves as a state.

As mentioned in the previous item on natural and working lands, California's climate directives include a few key statutes and Executive Orders. You are already familiar with our AB 32, SB 32, scoping plan, and 2050 emission reductions targets. To accomplish these targets, near-term we're making progress towards maximizing fossil fuel-related emission reductions in the state, while long term, we work to develop strategies for the natural and working lands sector, as you heard in the previous item.

Governor Brown's most recent Executive Order calling for carbon neutrality by 2045 has to be implemented, but we anticipate that it will build on our successes in reducing fossil carbon, and will require additional dramatic reductions and sequestration.

In total, these statutes and Executive Orders put us on the path to reducing our emissions in the fossil energy and industrial sectors. We rely on our natural and working lands and other mechanisms to sequester whatever emissions remain.

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AIR POLLUTION SPECIALIST BAMBERGER:

Since the adoption of the 2008 scoping plan, California has implemented greenhouse gas emission

reduction measures within California in all the following sectors: Transportation, energy, industry, waste, natural and working lands, and water.

Our 2017 Scoping Plan update builds on our previous successes and includes programs that support both air quality and climate goals. This comprehensive approach is working.

Our 2016 inventory shows that we are below the 2020 target four years ahead of schedule. Importantly, the auction proceeds raised through our Cap-and-Trade Program are being reinvested in the state for programs that help to support our air quality and climate goals, with at least 50 percent of the proceeds benefiting disadvantaged communities.

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AIR POLLUTION SPECIALIST BAMBERGER: Many commenters have suggested that we focus our efforts within California and on California forests in particular. As you heard this morning, we have been doing exactly that. Forests are a critical part of California's climate efforts. California is looking to forests to contribute significant emission reductions within the state. We are also putting our money where our mouth is by making significant investments in California forests.

In fact, over \$800 million have been committed to

forests and other natural and working lands. Over 200 -over 20,000 trees have been planted in urban settings
through use of Greenhouse Gas Reductions Funds, and 110
million metric tons of carbon have been sequestered in
forests through the Cap-and-Trade Program.

For the past eight years, California has been leading the world through our development and implementation of our own domestic forest carbon program, benefiting forest owners in California and throughout the entire United States.

This experience has afforded us a unique opportunity to work directly with sovereign tribes, including the perspective that tribal force action is critically important to the state's overall climate actions.

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AIR POLLUTION SPECIALIST BAMBERGER: Like our efforts on short-lived climate pollutants and our zero-emission vehicle alliance, we are convinced our actions and partnerships must also extend out further on forests. This is why tropical forests have always been an important part of California's climate consideration since the adoption of AB 32.

AB 32 specifically directed CARB to consult with other jurisdictions to develop international greenhouse

gas emission reductions programs. The original 2008 scoping plan and every subsequent update since then has spoken to international mitigation action through the reduction of tropical deforestation.

California is already experiencing the effects of climate change, rising sea levels, reduced snowpack, drought, heat waves, and, of course, wildfire. Climate change is making events like these more frequent, more catastrophic, and more costly. It affects all of us, and the impacts are often disproportionately borne by the state's most vulnerable and disadvantaged populations.

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AIR POLLUTION SPECIALIST BAMBERGER: Even with the context I've presented you still may ask why California has continued to be engaged in discussions and analysis of how our state can help protect tropical forests. This presentation will cover much of the history, the technical work, and the partnerships we've forged over the last decade in tackling this topic.

First, I'd like to set the stage.

As indicated in the recent IPCC report on the impacts of global warming, California and the world must achieve a transformation between now and 2030 in all major sectors. Emissions in California, the majority of which are from the transportation and electricity sectors, are

subject to regulations, incentive programs, and market based approaches, and we are well on our way to achieve our 2020 and 2030 emission reductions targets, which are very much in line with the reductions called for by the IPCC report.

You already heard how much we are increasing our efforts to address emissions in our natural and working lands sectors. This standard being presented to you now is focused on one of the largest emissions sources, deforestation of tropical forests. The IPCC report and our many years of partnerships with other jurisdictions indicate that we can and must address emissions within California and seek to incentivize reductions elsewhere.

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AIR POLLUTION SPECIALIST BAMBERGER: The IPCC report identified the reductions of emissions from deforestation as necessary to limiting the increase of global mean surface temperature.

This is not a surprise considering the magnitude of emissions caused by deforestation. The fact that deforestation can act as both a source and a sink and that deforestation -- and that forest mitigation activities have the potential to contribute as much as 50 percent of the solution to climate change. To put this into context, emissions from deforestation exceeded total emissions for

cars, trucks, and ships combined worldwide annually.

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AIR POLLUTION SPECIALIST BAMBERGER: As can be seen on this map, the world has already lost a significant portion of its forest, both boreal and tropical. The rate of deforestation has been trending upward. From 2000 to 2017 over 800 million acres of forest have been lost. This is roughly equal to all forestland in the United States, including Alaska.

Worldwide deforestation is occurring at over 8,000 acres per hour. Global carbon dioxide emissions from tropical deforestation exceeds two billion tons of CO2 per year.

Many of the drivers of deforestation are the very same economic activities that people depend on to feed their families. If a viable alternative fails to emerge, one that actually can deliver local benefits and support standing intact forests, deforestation rates will continue to rise.

CARB has worked to assess the tools available to address tropical deforestation. This includes direct investment, divestment, sustainable procurement mandates, demand-side campaigns, supply-side pressure, and incentives through market-based programs. It is clear that more is needed.

A jurisdictional scale, sector-based crediting program is the best option available to CARB to support needed action. This standard seeks to present a viable alternative for farmers, ranchers, communities, and governments to value standing forests, because despite what some commenters may assert, there is already a value being assigned to tropical forests, one which values conversion over protecting forests and those individuals who rely on them.

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AIR POLLUTION SPECIALIST BAMBERGER: The standard establishes robust criteria to evaluate programs that have been designed at the national or subnational scale to reduce greenhouse gas emissions from tropical deforestation and degradation. It contains explicit requirements for the protection of forest-dependent communities and indigenous peoples.

Today's vote would be to endorse the set of criteria to spur action that we can observe, assess, and determine which jurisdictions are achieving emission reductions and other benefits.

Today's vote, just to be clear, does not amend the California Cap-and-Trade Regulation. It does not link the Cap-and-Trade Program with any other jurisdiction, and it does not make tropical forest offset credits eligible

for use in the Cap-and-Trade Program.

Some commenters submitted questions directly to Board members, including Supervisor Serna on this and other points. In our briefings with the Board members, we worked to address these questions and other questions raised by Board members, and to highlight the areas of the standard that help to address these concerns. And in anticipation of some of the comments we may hear, it is worth noting that even if we linked with a sector-based program in the future, all existing offset usage limits established by AB 398 would continue to apply.

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AIR POLLUTION SPECIALIST BAMBERGER: So what can the California Tropical Forest Standard be used for now, if the Board endorses it? And is it limited to programs that allow offset credits?

The standard sets forth criteria for accounting for emissions and emission reductions in a trans -- transparent and verifiable manner. This type of accounting, through a detailed stepwise approach, lends itself to a wide range of programs that could recognize financially actions taken to reduce deforestation.

For instance, this could include:

Jurisdictional payment for ecosystem services; sustainable sourcing mechanisms that commodities companies

could use to make good on their zero net deforestation commitments; the International Civil Aviation organization's carbon offsetting and reductions scheme for civil aviation or emerging trading instruments that can be used in China, as; well as other voluntary carbon markets.

And while the standard was developed initially for subnational jurisdictions in mind, the standard could easily be applied at the national level.

So as you can see, while the standard was developed in the context of an emissions trading system, its use is not limited to emission trading systems.

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at an example of how the standard can be used. Aviation accounts for about two percent of global CO2 emissions. In 2010, the International Civil Aviation Organization, ICAO, adopted a goal of keeping net CO2 emissions at the same level as 2020 and beyond. ICAO has looked at a suite of measures, including fuel efficiency, renewable fuels, operation improvements, and a global market-based measure to reduce this -- to reduce this goal -- to reach this goal.

Tropical forests are anticipated to be a major source of emissions reduction units for airlines to comply. This standard could provide a model to ensure the

highest standard available is used.

It is never certain what level of rigor treaty body will ultimately adopt; and providing a viable rigorous standard as a model to help ensure that a ton of CO2 emitted by an aircraft will really equal a ton of CO2 resulting from avoided deforestation is what is presented today. And that is done in full recognition and support of the rights of local communities and indigenous peoples, that they are protected and that any resulting financial benefits are shared equitably.

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AIR POLLUTION SPECIALIST BAMBERGER: Development of the standard commenced with the 2008 scoping plan and creation of the Governors' Climate and Forests Task Force in 2008.

The GCF is currently composed of 38 jurisdictions from ten countries representing more than one-third of the world's tropical forests.

The very first Cap-and-Trade Program -- or sorry, the very first Cap-and-Trade Regulation adopted in 2011 specifically identified deforestation as a potential jurisdictional sector-based program. CARB staff have continued to provide updates to the Board, hold public workshops, release white papers, and listen to stakeholder feedback since then.

Subsequent to the release of a white paper discussing tropical deforestation in October of 2015, CARB staff held a series of workshops relevant to the development of the California Tropical Forest Standard.

The October 2015 workshop discussed expert recommendations, case studies from jurisdictions in Mexico and Brazil, participation of indigenous peoples in the Amazon, and forest carbon monitoring technologies.

The March 2016 workshop discussed program scope, how to set historical baselines, crediting baselines, and monitoring and reporting requirements. And the two workshops in April 2016 discussed social and environmental state safeguards, ensuring benefit sharing, stakeholder participation, land tenure, and effective governance.

Throughout this time, we continue to engage with GCF partners and with indigenous people, and local communities. All updates to the scoping plan, including the most recent in 2017 have continued to assess jurisdictional-scale avoided tropical deforestation programs.

The draft craft standard was released on September 7th 2018, which brings us to today, and to endorsing the standard so it can be used by programs now.

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AIR POLLUTION SPECIALIST BAMBERGER: This

standard sets a high bar, and it is the first of its kind. It is based on years of experience, leveraging knowledge gained by international bodies working on tropical deforestation. It sets minimum criteria against which jurisdiction -- against which jurisdictional-avoided deforestation programs can be assessed, and it enhances requirements for transparency, verification, social and environmental safeguards. And it can be applied at the subnational or national level.

This standard requires that a jurisdictional program be developed through a robust public process, which ensures engagement with indigenous peoples and local communities.

It requires transparent development of a reference level, and details for how the jurisdictional plan to monitor, report, and verify avoided emissions for deforestation will occur. The sector plan continues methodology -- contains methodologies that will be transparent and scientifically sound. The program cannot allow double counting of any emission reductions in any other voluntary or mandatory program and it must be designed to be consistent with national efforts, including nationally determined contributions under the UNFCCC Paris Agreement.

AIR POLLUTION SPECIALIST BAMBERGER: The standard accounts for emission reductions that are above and beyond a jurisdiction's crediting baseline, and this crediting baseline is set, based on a jurisdiction's reference level. The reference level is set to be consistent with IPCC methodologies, and determined using transparent and high-quality remote sensing and ground-level data to determine forest cover loss and -- forest cover and forest loss.

The crediting baseline reflects previous commitments by the jurisdiction to reduce emissions from deforestation. It is a conservative approach designed to underestimate emissions reductions by beginning 10 percent below the established emission reduction -- the emission reference level. It linearly declines based on the jurisdiction's 2050 target, and it takes into account nationally relevant determined -- jurisdictional determined contributions.

Only emission reductions that exceed the crediting baseline would be considered additional and be eligible for crediting.

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AIR POLLUTION SPECIALIST BAMBERGER: This sector plan must have detailed requirements for monitoring, reporting, and verification. There are requirements for

annual reporting for emissions reductions, and accounting for any uncertainty that the measurement -- and the measurement accuracy.

Third-party verification is also required.

Verification helps ensure the accuracy and integrity of any emissions reductions, as well as the conformity with social and environmental safeguards.

There are requirements to assure the permanence of any emission reductions. A sector plan must identify, assess, and quantify the risk of reversal. These quantified risks determine a jurisdiction's contribution to a forest buffer pool to ensure against reversals.

A sector plan must also take into account both activity- and market-shifting leakage. A plan -- the plan must address mechanisms to mitigate or eliminate leakage, and account for any remaining leakage through a deduction in crediting.

The sector plan must include an effective enforcement mechanism. It must make the reports and data publicly available, and incline emissions data reports, safeguard reports, and verification reports on a public website.

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AIR POLLUTION SPECIALIST BAMBERGER: Finally, the standard includes requirements to ensure that the

development and implementation of a jurisdiction's sector plan engages stakeholders, and in particular, benefits indigenous peoples and local communities.

These requirements are most often called social and environmental safeguards. These safeguards are based on international best practices. It is expected that the transparent approach in the standard would reinforce the implementation and enforcement of these best practices.

Jurisdictional programs must be developed and implemented consistent with Annex 1 of the UNFCCC Cancun Agreement. Jurisdictions must demonstrate consistency with using principles, criteria, and indicators that conform to international best practices for social and environmental safeguards, and must provide narrative descriptions as to how each of these principles and criteria are actually met.

Adherence to standards such as the Green Climate Fund Indigenous Peoples Policy, the United Nations

Development Program Social and Environmental Standards,

Green Climate Fund/UN Women Mainstreaming Gender in Green

Climate Fund Project's manual, and the International

Finance Corporation Environmental and Social Performance

Standards must also be used to help in demonstrating the consistency.

Forest-dependent communities, including

indigenous communities, must be consulted and participate in the development and share in the benefits of the jurisdictional sector plan.

And the required social and environmental safeguards report must be posted on a publicly available website along with the verification report. There is -- there also must be a publicly available grievance mechanism within the jurisdiction.

International best practices for social and environmental safeguards identified key principles, the criteria to evaluate the principles, and indicators to show progress towards achieving the criteria. Some of the key principles include: recognizing and respecting the rights to lands, territories, and resources; ensuring benefits are shared equitably among rights holders; improving the livelihood, security, and well-being of indigenous peoples with special attention to women and vulnerable people; and ensuring all rights holders and stakeholders participate fully and effectively, including through free, prior, and informed consent.

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AIR POLLUTION SPECIALIST BAMBERGER: Staff have reviewed all the comments received on this standard and have made the following updates:

To address some potentially unintended

consequences of the original crediting baseline, the language was modified to require the crediting baseline to linearly decline from 10 percent below the reference level to a jurisdiction-specific 2050 target;

To bolster the social and environmental safeguards, requiring consistency with Annex 1 of the UNFCCC Cancun Agreement, and adherence to the recently adopted Governors' Climate and Forest Task Force guiding principles of collaboration and partnership were added.

Thirteen principles were adopted by the GCF members on September 10th, 2008 at their annual meeting in San Francisco. These principles recognized and respect indigenous peoples and local communities' rights to their lands, territories, culture, self-determination, and governance; recognize the historic contribution of indigenous peoples and local communities; and facilitate and promote partnerships between subnational governments and indigenous people, and local communities.

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AIR POLLUTION SPECIALIST BAMBERGER: Staff completed a draft environmental analysis, or EA, for the California Tropical Forest Standard. The draft EA was released for a 45-day comment period on September 4th, 2018. The public comment period closed on October 29th, 2018, and staff prepared written responses to all of the

draft EA comments.

Subsequently, revisions to the standards were released. A total of 76 comment letters were received during the comment period, and 11 addressed the standard EA and raised a substantial environmental concern. Staff made minor modifications to the draft EA based on these comments.

The resulting final EA, along with responses to the environmental comments received on the record, were publicly released in advance of this hearing on November 9th, 2008. The Final EA applies conservative interpretations, and finds that some compliance activities may lead to potentially significant and unavoidable adverse impacts to some resource -- some resources, because project level mitigation lies outside of ARB's authority.

In addition to the public comments CARB received during the noticed public comment period, we also received late comments filed after the noticed comment period deadline. We have considered these comments and determined that they have been previously addressed in responses to environmental comments prepared by CARB staff.

It is expected that potentially significant impacts could be feasibly avoided or mitigated to a less

than significant level through jurisdiction-level environmental review associated with compliance responses and the attendant compliance with local, regional, and other laws and regulations.

Despite the potential adverse impacts, other benefits to the proposed amendments like improved health, from co-pollutant reductions, and preserving tropical forests warrant approval and outweigh and override the unavoidable significant impacts.

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AIR POLLUTION SPECIALIST BAMBERGER: And that brings me to the final slide of the presentation. Endorsement of the California Tropical Forest Standard will send a strong and needed signal for jurisdictions to take immediate action to reduce deforestation. You will hear from commenters on this and other aspects of the standard.

Suffice it to say that the Board's endorsement of the standard is an important action, and it will not land with a thud. As you will likely hear from supporters of the standard, pending its approval, there are ready to begin implementation of it now to test it out and to seek to include it in other programs like those we described earlier. We can learn from these efforts. We can report -- and we can report back to the Board on the

results.

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Based on all of this, staff recommends that the Board approve the resolution that has been prepared with this item, and endorse the California Tropical Forest Standard today.

The resolution includes approval of the written responses to environmental comments, certification of the final Environmental Analysis, making the required CEQA findings and Statement of Overriding Considerations, and endorsement of final -- of final California Tropical Forest Standard to be effective as of today, November 16th, 2018.

This concludes the staff presentation.

Thank you.

CHAIR NICHOLS: Thank you. We have over 85 people who've signed up to testify. So, as I indicated at the beginning, we will be asking all witnesses to limit their comments to two minutes. But we will also ask that that time be extended for those who require translation, so that they will have the additional time to make sure that they've had an opportunity to have their testimony heard through the interpreter. And that's kind of the first thing.

It is now 10 to 11:00. I think we should probably do what we did yesterday and not take a formal

lunch break. But the Board will take at least two breaks in the course of the next couple of hours of about 10 to 15 minutes so that the court reporter will have a chance to stretch. And I think we should start -- we should have one of them basically before we begin the testimony.

I do have -- it's clear that, you know, this is one of those issues that despite having been discussed in various ways for over a decade, at least a decade, has not resulted in consensus, let's put it that way. There is -- there is definitely going to be a strong diversity of views that we will be hearing and major disagreements about what we ought to do.

But in order to lay some groundwork, which I think is necessary for everyone to hear, I need to ask the staff to say, you know, beyond staff time that CARB has put in, which is our own people, we have participated in international meetings. We have had trips to international meetings that have been funded by entities other than the State of California. And I would like for you to spell out, in as much detail as you can, what that -- really who's been -- who's been paying for this? Let's be blunt about it.

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH CHIEF GRAY: Sure. Thanks Chair Nichols.

That's right, so we've been participating

primarily in the Governors' Climate and Forest Task Force, which California helped found ten years ago this past September. And those -- that organization solicits funding from folks like the Government of Norway, previously from the government of the United States was the first funder of that organization, to really do capacity building in the different members states and provinces of this fairly unique partnership now 38 states and provinces from around the world.

That organization funds two delegates from each members state or province to participate in annual meetings. It also raises funding for capacity training in different regions, so maybe within Brazil, or within Mexico, or within Indonesia.

And California has participated in the annual meetings of this partnership group every year since it started -- since it started here in California.

We've also participated in meetings that relate to tropical forest conservation that have been organized and paid for by the USAID, by some of the State Department folks years ago, and in organizations -- in meetings that have actually happened here where we had international partners come and participate in our workshops or meetings in Sacramento.

So over the last ten years, we've been engaging

with a lot of different jurisdictions, a lot of different representatives for those jurisdictions, from communities and indigenous organizations, and governments from within those jurisdictions. And that's really led to all the information that we've used to develop this standard.

CHAIR NICHOLS: And just to be clear, has any of this group -- has any of this work been funded by forestry businesses, entities that specifically engage in forest cutting?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Not to my knowledge. No, I think it's really
all been working with governments and with development
funding from the U.S., and Norway, and I believe Germany
and some other governments.

CHAIR NICHOLS: And I also would like to just draw a line under this issue about offsets, because having been here ten years ago, I remember that there was, at one point, a strong desire to see international offsets in the California Cap-and-Trade Program. And we did not do that. We never have had any international offsets allowed and our rules don't allow for it, though there is a placeholder there.

But again, just to be clear and again acknowledging that, yes, this could be a step in that direction, is there any implication from what we're being

asked to do today, that we would be adopting any new rules that might allow for those offsets to be used in California?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Not at all. The action before you today will
not result in any of those changes that would have to
happen before that could happen.

The standard before you all today as the presentation laid out really is synthesizing all the best practices and putting out a standard that we think others will use. And I think we'll hear from them today that they're ready to use it.

CHAIR NICHOLS: Okay. And then one more question from me has to do with breadth of the consultation. You emphasized the ten years that you've been working at this. But could you give some sense of what other entities or individuals, for that matter, if it's okay, within California have been involved over this ten-year period either on visiting the forest themselves or taking part in these discussions?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Sure. I think a lot of the commenters you'll
hear from today have been involved in that from all sides.
I think some of the NGOs in California, EDF, The Nature
Conservancy Earth Innovation Institute have been involved.

Some of them very heavily involved in different regions in Brazil and Indonesia for many more than one decade.

Many of the organizations we'll hear not supporting this action have been involved in the discussion in our workshops. So we've heard a lot of the concerns and really tried to address them in the standard development.

But there have been a lot of California entities from the NGO side, from the verification side, so verification companies that are based here in California have also been involved on the ground doing some of these activities as well.

CHAIR NICHOLS: And on the trips that you've taken to Mexico, or Brazil, or any place else for that matter, you've had, I know, staff from other parts of California government, legislators?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Yeah. So the trips that ARB staff has done
on primarily has been focused on working with governments
from these other jurisdictions with indigenous communities
from these other jurisdictions. I do know there have been
some delegations from the Legislature to the Yucatán in
Mexico to lots Acre, Brazil, which is one of the leading
states in terms of large policy design at the jurisdiction
scale. So there has been some legislative participation

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    in this discussion, and in some of these meetings as well.
             CHAIR NICHOLS: Okay. I'm going to ask that we
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    take a ten-minute break, and really make it a ten-minute
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            And that we'll then get back and start with the
    break.
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    testimony right away.
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             Thank you.
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             (Off record:
                           10:55 a.m.)
8
             (Thereupon a recess was taken.)
9
             (On record: 11:08 a.m.)
             CHAIR NICHOLS: All right, ladies and gentlemen,
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    if you could take your seats and we'll get back to work
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    here. We'll begin our testimony. Okay. And we'll call
    for the first witness.
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14
             As Board members -- in case anybody is unfamiliar
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    with this process -- the gavel.
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with this process -- the gavel.

Okay. I believe the list is up on the screen there, and you can see where you are in line. As I mentioned before, we appreciate it if people will come

19 down towards the -- please come down towards the front

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when we -- when you see that your name is coming up soon,

so we don't have to spend time waiting for people to move

up to the microphone and we do use both microphones.

Okay. Thank you very much. Let's start. Thank you.

MS. TODD: Good morning, Chair Nichols and

members of the Board. My name is Kimberly Todd, a technical specialist on forest and climate with the United Nations Development Program, UNDP.

As the UN's development agency, UNDP works globally supporting about 170 countries and territories around the world to achieve sustainable development and eradication of poverty. Across the tropics and beyond, we're supporting developing countries to reduce emissions from deforestation and forest degradation with an emphasis on land, policy, and governance reforms, as well as full and effective engagement of indigenous peoples and forest communities.

My colleague and I are here today representing UNDP to commend the global leadership that California is demonstrating through this proposed Tropical Forest Standard. By recognizing and incentivizing enhance Climate action in tropical forests, California is providing an important contribution and positive signal to global efforts to reduce deforestation, which are absolutely essential to tackle climate change.

As recognized internationally, we don't stand a chance of keeping warming below two degrees celsius if the current rate of tropical forest loss continues.

And subnational jurisdictions have enormous potential to contribute to these global efforts to reduce

deforestation and mitigate climate change, serving as innovators, providing models for programs and policy-level interventions that can be scaled up.

We applaud California for providing a strong incentive for enhanced action in tropical forests at the subnational level. We find that the standard provides a robust framework, which ensures there are real transparent emission reductions, and that environmental integrity is maintained.

We are supportive of the technical aspects of the standard, particularly the call for consistency with the IPCC guidelines, as well as strong provisions to address the risks of non-permanence and leakage. We were further encouraged to see specific revisions that have been made to the draft standard. We found that enhanced clarity on specific requirements, as well as incorporation of elements that further increased practicality and flexibility for jurisdictions to apply the standard have served to strengthen it even more.

Again, we commend California's leadership in this area, and we voice our support for endorsement of the standard. Thank you for the opportunity to contribute our inputs.

MS. LAUGHLIN: Good morning. My name is Jennifer Laughlin, and I'm a technical specialist on safeguards at

the United Nations Development Program. UNDP applauds the transparency and the inclusiveness with which the California standard has been designed, and welcomes the revisions made to the draft text on safeguards in the context of third-party verification, risk assessment, consistency with the UN Climate Convention, and adherence to the GCF Task Force Guiding Principles.

The additions have clarified and reinforced the already strong commitment to robust application of social and environmental safeguards, as reflected in the standards use of red SCS as the benchmark.

The chosen benchmark provides a detailed framework of reporting on safeguards implementation with clear indicators to measure progress related to many of the key issues that are foundational to a successful jurisdictional plan, including protection of indigenous people rights, gender sensitive approach and equitable benefit sharing.

Endorsement of this standard will pave the way not only for other subnational jurisdictions to achieve emissions reductions from the forest sector in accordance with international best practice, but could also be of use to national governments and global organizations like UNDP, as they support processes to do the same.

Today, we look to you to make a significant

contribution to addressing global climate change at a time when it is urgently needed, and we fully support endorsement of the standard.

Thank you.

CHAIR NICHOLS: Thank you.

(Thereupon an overhead presentation was presented as follows.)

DR. SCANLAN LYONS: Good morning, Chair Nichols, Board members. I'm Dr. Colleen Scanlan Lyons, project director for the Governors' Climate and Forest Task Force.

I'm also a cultural anthropologist who has been working in tropical forest regions for nearly 30 years, kind of dating myself here.

California, a founding member of the GCF, is once again leading the world by putting forth a strong Tropical Forest Standard, which sets a high bar for other governments. We know that forests can provide up to 30 percent of the solutions for climate change. We know that indigenous lands make up 18 percent of the world's forests, and indigenous peoples have the highest rates of forest conservation on their lands. We also know that subnational action for climate policy is critical.

Given this, last month, as we heard from the staff, the GCF members overwhelmingly endorsed a set of guiding principles for collaboration and partnerships

between subnational governance -- governments, indigenous peoples, and local communities.

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DR. SCANLAN LYONS: This novel partnership took years to develop. And it was led by indigenous and community leaders, as well as their governmental partners. The principles were endorsed by 35 governments, by 17 NGOs, and by 18 different indigenous organizations representing over 17 and a half million people.

These principles were part of California's Global Climate Action Summit, and we're very happy that they are now incorporated into the standard. The GCF is ready to collaborate with California. These efforts will be lead by the people in tropical forest jurisdictions. They are the people that are going to tell you what works, and what doesn't work in the places where they live, and many of them are here today who will speak in their own voices.

The GCF Indigenous and Local Communities Working Group will provide a forum for exploring how indigenous peoples and governments can work together to co-design transparent processes than conserve forests, reduce emissions, and promote low-emissions development in collaboration with the people that live there.

We'll explore models, and we will also evaluate the extent to which GCF governments are taking the

guidance principles seriously.

CHAIR NICHOLS: Thank you. I'm sorry the time is really short.

DR. SCANLAN LYONS: No problem. Thank you very much.

CHAIR NICHOLS: Appreciate your comments.

DR. BUSCH: Good morning. I'm Dr. Jonah Busch, the chief economist of the Earth Innovation Institute. It is my honor to read from a letter signed by 118 scientists strongly urging you to endorse the California Tropical Forest Standard.

These scientists include many of the top climate and forest scientists in the world. They include eight lead authors of the Intergovernmental Panel on Climate Change, three former Directors General of the Center for International forestry Research, three MacArthur Genius Grant awardees, eight members of the National Academy of Sciences, and one member each from the European and Australian Academy of Sciences.

I read from the letter in part. "We are scientists, ecologists, economists, anthropologists, geographers, and climatologists. We are all directly involved with research to better understand climate change and identify the best ways to avoid its most dangerous impacts.

Many of us have spent decades working in tropics. We strongly urge the California Air Resources Board to endorse the California Tropical Forest Standard. The letter makes four points. One, slowing deforestation and degradation of tropical forests is one of the most cost effective, near-term steps towards a zero net carbon budget globally.

Two, the standard would establish a very high bar of methodological rigor, transparency, and accountability.

Three, jurisdictional strategies, such as this standard seek systemic solutions across entire states and provinces, and avoid the leakage and dubious carbon accounting of some of the project-based examples cited by others.

Four, one of the highlights of the Global Climate Action Summit in San Francisco was the announcement of guiding principles for collaboration and partnership between subnational governments, indigenous peoples, and local communities. These principles have now been incorporated into this standard.

In conclusion, it is urgent that the standard be endorsed. If endorsement is postponed, an important opportunity will be lost.

Thank you.

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MR. GUTIERREZ(through interpreter): Good

morning. I am agricultural engineer. Lorenzo Andres

Vargas Gutierrez with the Government of Colombia, and we
represent the 48 percent of the forests in our country.

The climate problem is a worldwide problem. And therefore, the importance of the tropical forests. And this includes reptiles, mammals, fish, more than 60C -- 6,300 plants in Colombia. The standard in the forest of California is a good incentive and a good example for the rest of the world, because in Colombia, the standard -- to implement the standard in the forest, it's way of peace. It is important and imperative to do it now.

In Colombia as the President of 2018-2019 for indigenous groups, you know, global way, we are going to implement it in our country in Columbia. And it is why we support a standard with tropical forests, because as a scientific level and along with the leaders it is proven to work.

It is important --

Excuse the interpreter.

The standard, it is important for indigenous communities and local communities to change the extra economy mining and hydro through an incentive of taking care of the tropical forests.

It is why we're asking for ARB to implement clear elements because they're important for the planet.

Thank you very much.

MR. GUZMAN: Good morning, members of the Board. My name is Sergio Guzman from Guatemala from the northern part of Guatemala. We live in the forest community. It is an area which is more about two million hectares of tropical forest. We've got 15,000 people living from the forest in there. We are members of the Mesoamerican Alliance of Forests and People. And you can see over there the forest carbon in the indigenous and local communities territories. I think you guys have one of those in your hands already.

I came and traveled so far from my country to come here and to congratulate you on the effort of the development of this tropical standard. At the Mesoamerican Alliance, we are more than one -- we have more than 100 million hectares of tropical forest. And 500,000 people living from the tropical forest.

Our communities are called the wild and salty forest because they provide benefits to our local communities, to the Californians, and to the whole world, because we reduce global greenhouse gases.

We congratulate again the California Air
Resources Board on the development of these forest
standard as a part of the leadership that California has
shown already at worldwide level. And we recognize that

these are very high standard. We strongly support the endorsement of this standard for the tropical forest. We have reviewed it and we say it is our standard for the local communities and the indigenous people, because it's the one that we were waiting for.

We are doing work on other standards and do not meet the requirements that this standards is proposing.

So we -- as a local communities has managed the forest in a sustainable way, we consider ourselves as Strategical partners of California and this standard. We will try to apply it in our territories.

And we thank again for the possibility of doing this high level standard. If not us, then who? We have to do it and act now.

Thank you CARB. It is our -- this is a unique position for the CARB to influence the international action.

Thank you.

2.4

CHAIR NICHOLS: Thank you.

MS. MEDEIROS(through interpreter): My name is Magaly Medeiros, biologist and master of development in the environment in Brazil. I am also the President of the Institute of Climate Change and Regulations of Environmental Services and member sof the Global Committee of Indigenous Peoples in Brazil.

I have worked since 1990 for the sustainable development of the government of Acre, Brazil in the program for the conservation of tropical forests. I'd like to congratulate California for the great incentive in this direction. Our incentive has reached many other alternatives, including members of many governors or the institutions that has joined force towards this main objective.

Yes, the fact that we have joined forces among the community has made it stronger and more effective lately. You work -- we work hard and intention of safeguard and restore the rights of the indigenous people, especially in their protection. We also work straight closely with your international organizations that has been supportive. And we unite forces and fight together for the same objective.

Besides the participation of different sections of society, like woman's differences -- branch of professionals, we have also worked with the indigenous community.

(Lies.)

CHAIR NICHOLS: Your time is up. Sorry.

MS. MEDEIROS: It's a great opportunity to stand

24 | at CARB to show it. (Speaking in Spanish.)

CHAIR NICHOLS: Sorry. Excuse me.

1 (Lies.)

2.4

2 | MS. MEDEIROS: (Speaking in Spanish)

CHAIR NICHOLS: Everyone will get a chance to speak. If you signed up, you have a chance to speak. You are not allowed to yell at the speaker. That is not appropriate, and it doesn't help you either.

Thank you. Okay. Thank you.

THE INTERPRETER: The witness will read his whole statement first and I'll translate afterwards.

CHAIR NICHOLS: Okay.

MR. CHI(through interpreter): With the death of the last, tree life is over.

Good morning. My name is Basilo Velasquez Chi.

I am of Mayan origin and I dedicate my efforts to strengthen the livelihoods of the Mayan communities of Quintana Roo Mexico through the sustainable management of natural resources. I am part of the global committee of local communities and indigenous peoples for dialogue with subnational government members of the GCF.

I have come here to express mine and our community's support of the standard being discussed today, which provides the elements and framework to ensure the conservation of our natural resources our culture and livelihood.

Throughout the years, we, the Mayan communities,

have taken care of our jungles and lived in harmony with nature in the context of our idiosyncrasy and way of seeing life, our customs and traditions. These jungles are what give us life and give life to the planet.

However, in recent years, these natural resources are being pressured by the lack of economic opportunities and livelihoods in our communities, where our people, due to the situation, are forced to abandon their lands and the management of the resources to go out in search of employment, sometimes get rid of their lands or deforest them to generate economic resources, even the control of unsustainable practices in order to access economic resources that are allow them to survive.

Mayan communities' families, men and women, we develop our own initiatives for the management and conservation of our natural resources, but they need to be strengthened to improve the quality of life and become permanent means and guaranty the conservation of the jungles where we live, as well as the important environmental services the jungle provides.

For our communities, it is important that the government of California approves the Tropical Forest Standard, because it represents a model of safeguards for the communities that protect their jungles and forests.

The principles of collaboration included in the

standard have been designed an approved by GCF members, and encompass the main rights of indigenous peoples and local communities recognizing Mexico and internationally.

Almost ending.

This standard will provide the opportunity for our region to replicate the California model in order to strengthen our communities, guaranty the protection of natural resources, and contribute to climate change solutions. If this standard is not endorsed, we run the risk that these natural resources that we all need are lost and are irrecoverable, making the climatic situation that we all worry about more serious.

We all need to be united. The solution is in our hands. Thank you.

CHAIR NICHOLS: Thank you.

And obviously, I let you go on past the time, because we're trying to figure out how to manage this situation appropriately.

I would really appreciate in the future, if you could summarize the remarks, so that the speaker herself or himself just speaks for two minutes. Otherwise, this is not going to work.

THE INTERPRETER: The interpreter will conduct a side translation of the document. This document is much smaller than the previous one.

1 CHAIR NICHOLS: Okay. Thank you.

MS. AURORA(through interpreter): Good morning.

My name is Francisca Aurora. I am from the Aurora -- the

Court -- I am speaking in reference to the person

Francisca Aurora, the person who wrote this statement.

Her name is it -- it has disappeared. Diana Mouri

Gonzalez.

I'm speaking on behalf of the coordinator and professor of the organization of indigenous professors, Acre, in Brazil. And I'm a political assessor for the Association of Movement of Agents -- indigenal agents of Acre. I also received the Chico Price Mendes, who was the father of the movement an alliance of the forest. I'm here to talk in reference to -- the through Diana. She came from the indigenous places of Shipibo representing 17 indigenous places in Ucayali, Peru.

There are 51 towns -- indigenous towns, and 17 from Ucayali. We are united because we think that we can change the world. We represent the women of the Amazon, and we have messages for you. What has occurred with Acre to two decades ago, it was an example for all the other states. It was a construction process, and a system of incentives through Acre. And they had a letter that elaborated the principles and the constructions of safeguards, and participation consultations, and

information, and creation of working indigenous groups, and through -- and their own government.

The problem is global is not just local in Peru. And we know that you can support us to manage the forest in a better way. I know it requires decision, sometimes political decisions, and support.

Thank you.

MR. MONTERO-SOLORI: Hello. Good morning, members of the California Air Resources Board, staff, and colleagues. Dear Chair, Mary Nichols, with due respect, I start my comments.

My name is Jose Antonio Montero. I'm a lawyer, defender of human rights and the environment in Chiapas, Mexico. For more than 15 years, I have defended indigenous and local communities of human rights violations before national and international courts, suing the Mexican government.

I have seen how others have taken natural resource of the indigenous communities and continued to exploit them. I have defend communities and depend that -- depend of the forest. I have seen communities making sustainable use of the resources. I have seen how the development initiative of indigenous communities include women, young people, and respect their elders.

Today, I work to design public policies to

prevent that from happening again. For years, I have worked in design of instruments that allow the protection of the rights of the communities and the protection of the natural resource of which they subsist.

The leaderships shown by California in environmental actions and rights has been an example of the world. Those of who -- those of us who work in the protection of forests with indigenous rights protection have seen that California has shown the work of the instrument -- one of the instruments of public policy for the protection of its forests with the inclusion of indigenous and local communities.

The standard that is being discussed today in California is inspiring for other jurisdictions for those people working to warranty human rights, because this includes the criteria of protection and respect.

Approving it would be a very motivating message for us of work.

CHAIR NICHOLS: Thank you.

MS. McAFEE: Hello. I'm Kathleen McAfee, professor, and coauthor of the scientists letter opposing the TFS, now signed by more than 110 credentialed academic researchers. We only circulated this for a week. We had more than that. We deleted all the signatures except those of people who have done specific research on -- and

technical analysis of REDD ecosystems services and tropical forests conservation and offsetting.

I, myself, have done field work. I've written, edited peer-reviewed dozens of studies. I've heard hundreds of scientific presentations on REDD and tropical conservation. The field-tested facts speak for themselves. Tropical forest carbon offsetting is failing badly to mitigate climate change.

Even the most ardent early supporters of REDD now concede that there is no empirical evidence that such programs are having real environmental effects. As the studies demonstrate, REDD programs and jurisdictional or project do not keep forest carbon from returning to the atmosphere.

Forests burn, even in the Amazon, governments change, and policies are reversed, as we're seeing in Brazil. REDD projects are abandoned when minerals are discovered. Mining companies set up REDD programs to co-opt community opposition. Forest-dwelling people become accustomed to payments, ignore -- neglect their traditional sustainability practices and drop their conservation commitments when REDD payments run out. We've seen this over and over.

Project developers and certifiers eager for more contracts ignore contrary data and exaggerate stored

carbon quality. So forest carbon sequestration can never be real and permanent, as California law would require. Leakage is inevitable and cannot be fully quantified.

Really, the section in the TFS on leakage is shockingly weak, ignoring most the problems. And it strangely endorses the single most environmentally destructive land use, beef production.

There are alternatives. There are ways that
California can help slow tropical deforestation. Let the
ARB lead us in addressing the fact that California
refineries are importing a growing share of crude oil from
the expanding Amazon petroleum sector. Let us all support
the land rights and territorial rights of indigenous
people in line with the UN declarations to that point.

We're well aware that CARB means this not as a addition to cap and trade yet, but as launching point, which is all the more reason not to endorse a strategy that would dilute and delay our own obligations to reduce our emissions right here in California by adopting an international offsetting program that does not work.

(Applause.)

(Cheering.)

MS. HAYA: Thank you for the opportunity to testify. I'm Barbara Haya, research fellow at the University of California, Berkeley, and one of the 110

signers of the scholar's letter opposing the standard.

These researchers who study how REDD offsets forest conservation projects work and practice are cautioning ARB about the risks associated with this standard: risk of harm to forest communities, the limitations of the use of safeguards to avoid those harms, the ineffectiveness of so many programs so far to address the true drivers of deforestation, and the challenges of addressing leakage and permanence.

Important elements of the standard are vague or weak. For example, programs must include methods for avoiding or addressing leakage, or to show -- and to show successful past implementation of safeguards, but without the specificity needed to judge whether these challenging requirements have been met.

The history of the Kyoto protocol's offset program should send a strong warning. The large majority of the Kyoto Protocol's offset projects did not actually reduce emissions. This is well established. Countries used these credits to use -- to meet substantial portions of their reduction targets, even though many of involved knew that many of the credits did not ever -- did not represent real emissions reductions.

Paying countries embraced the program to drive down costs of meeting their climate targets, at least on

paper. And recipient countries promoted it for the funds they received. It is in this context that ARB is promoting a global standard for international carbon trading policy architecture in the forest sector.

The standard's vague requirements that can be broadly interpreted risk weakening global climate agreements the same way the Kyoto Protocol's offset program did, taking attention away from other proven approaches.

Lastly, the number of and caliber of the scholars who signed the scholars' letter should send a resounding message of caution. I believe strongly that the concerns raised by the field researchers closest to the ground setting the challenges and the outcomes of these programs in practice must be fully considered before the standard is endorsed.

(Applause.)

(Cheering.)

DR. OSBORNE: Hi. Thank you for the opportunity to speak today. My name is Tracey Osborne. I'm a university professor with expertise in energy and resources with a Ph.D. from UC Berkeley. And I've conducted research on carbon offsets for about 20 years.

I'm one of the authors of the academic letter signed by 110 scholars with expertise on carbon offsets

and markets, and the relationship to forest communities that my two colleagues spoke about.

The balance of empirical research suggests that while in theory carbon offsets can be a triple win for climate, forest, and communities, in practice, there are fundamental flaws powerfully reflected in my own research in Chiapas, Mexico.

There, the carbon market constrained small farmers' access to natural resources; provided minimal compensation; and altered their traditional forms of land use and governance. All the while, the major deforestation drivers of cattle ranching and oil plant -- palm plantations continued and expanded in the region.

Instead of altering traditional forest practices, which is the result of carbon markets, we need to support indigenous land-use practices, because according to Rights and Resources Institute, forests managed by indigenous and local communities account for nearly 300 billion metric tons of carbon equal to 33 times the global energy emissions of 2017.

An example of indigenous forest stewardship with significant climate benefits is a proposal of the Sarayaku community in the Ecuadorian Amazon called Kawsak Sacha, which means living forest in Kichwa language. Kawsak Sacha, or living forest, is a comprehensive proposal that

treats forests, not as store house of resources to be traded on a market, but as a sacred territory. Kawsak Sacha is also a concrete land-use plan about sustainable for management and food production that for generations have contributed to highly biodiverse forests rich in carbon.

Importantly, extraction of fossil fuels is strictly prohibited, which has been ignored in traditional carbon forestry projects. As you've heard today, many of indigenous peoples reject the carbon market. Therefore, I request that Board --

CHAIR NICHOLS: Could you please, sorry, summarize quickly.

DR. OSBORNE: -- discover alternate mechanisms disconnected from the carbon market such as a fund that could support sustainable forest practices, like Sarayaku's living forest proposal.

Thank you.

CHAIR NICHOLS: Thank you.

(Cheering.)

(Applause.)

MS. WITHEY: Good morning, members of the Board and Chair Nichols. My name is Lauren Withey. I'm a Ph.D. candidate at the University of California, Berkeley. I've been studying REDD+ for the last four years, including

spending a year in villages that were implementing 3,000 square miles REDD+ program funded by USAID on the Pacific Coast of Colombia.

I've examined through household surveys, interviews, and ethnography how communities have responded to the combination of tools that this \$30 million program provided of future financial incentives, alternative development programs, and governance strengthening. I appreciate the time and thoughtfulness that CARB staff has put into developing this standard ten years. You all deserve multiple Ph.D.s for this.

I would remiss though if I didn't sound a strong word of caution based on my experience on the ground. While you're not addressing a program or assessing rather a program per se today, your approval of a standard would be an endorsement of the incorporation of tropical forest carbon credits offsets, within ETS programs around the world.

Yet, I have seen in my work that these credits are extremely costly and unreliable, offering relatively little assurance for mitigating climate change or providing benefits to either the communities asked to reduce emissions or those who hope to buy credits from these programs for their ETS.

For the \$30 million spent on the program I have

studied, there have been no meaningful changes on the ground toward reducing degradation or deforestation.

While jurisdictional programs are supposed to provide some reductions and high transaction costs, I have seen in REDD+ projects, all of us who have read the requirements of the standard, which as my colleagues have mentioned, are still not fully adequate, recognize that achieving this will be extremely pricey for the implementing jurisdictions.

Indeed, I've seen through my research that the so-called rigorous quantification of carbon emissions through deforestation and degradation is mostly an expensive and elaborate performance. These include safeguard box ticking, contractors coordinating the program and prepping, prepping communities to say the right thing when validators arrive.

And I want to say that it's in nobody's interest in this system to question the integrity of these credits. These are well intentioned people involve in this chain of performances. But I believe the greatest benefits are accruing not to the communities or in terms of climate change mitigation, but to the contractors, who also take on the least risk in this process.

(Applause.)

2.4

CHAIR NICHOLS: Thank you.

We -- I appreciate the fact that we do have written testimony also from you and a number of the other researchers who are testifying here. So we also will be carefully looking at that.

MS. VIK: Thank you, Madam Chair. I much appreciate the chance to comment. My name is Vedis Vik, and I work as a senior advisor at the Norwegian Ministry of Climate and Environment. And I'd like firstly to extend our warmest thoughts at this Challenging time for the Golden State.

Like the rest of the world, we are looking to California, a true climate champion. And we're very pleased to have a bilateral relationship with you on climate change.

For Norway, our long-term engagement on tropical forests is our most important climate effort. For the last ten years, we have partnered with tropical forest countries and a huge number of other actors to help save the rain forests.

We've done so because the natural climate solutions, protecting and restoring forests, producing food more sustainably, and improving land use can deliver as much as one-third of the global climate effort we need by 2030. Yet, it's largely underfocused and underfunded, and we often call it the forgotten solution.

But if we fail, there will be no Paris goals nor many SDGs. And as you mentioned, Madam Chair, this morning, the IPCC report released a month ago clearly said that we need to do it all, we need to do it fast, at home, and abroad.

Norway is very impressed by California's actions on forests. In addition to your work to conserve and enhance your own forests, your partnerships with tribes in the U.S. have ensured forest conservation also at the largest scale. And through the forest offsetting program that you already have in place, you have been a front-runner for long-term solutions for forest conservation and climate finance. By developing a rigorous regulatory standard for tropical forests, California again leads the world by example.

We agree fully with you that it's extremely important that this be done right, also, in light of the new market mechanisms that now are emerging globally. The California Tropical Forest Standard will assist us all in setting a high bar. It will be of much needed help to other countries and to international mechanisms now developing their own systems, actors that should only be looking at standards that have such high social and environmental integrity as yours.

We have followed your efforts over many years and

we would urge you to endorse the standard today.

Thank you.

DR. DURBIN: I'm Dr. Joanna Durbin of
Conservation International ane Director of the Climate
Community and Biodiversity Alliance, a partnership of
non-governmental organizations that includes the Rain
Forest Alliance, The Nature Conservancy, Wildlife
Conservation Society and CARE.

We've reviewed the draft standard in detail, and we find it is strong and comprehensive, based on sound science, on real experience, and on transparent and inclusive consultations, and we recommend its endorsement.

Forest sector programs must be carefully designed and implemented to protect the rights and interests of indigenous peoples on local communities, and to maintain the biodiversity and ecosystem services on which they depend. This standard sets a high bar by requiring detailed and comprehensive reports on social and environmental safeguards that have been independently verified using principles, criteria, and indicators that conform to the REDD+ Social and Environmental Standards that we call REDD+ SES.

So the REDD+ SES provides a globally recognized comprehensive framework of best practices on participation, free, prior and informed consent,

transparency, grievance mechanisms, equitable benefit sharing, biodiversity conservation, and more.

Experience from using REDD SES in 17 tropical jurisdictions shows that it has supported transparent, participatory, and comprehensive assessment of safeguards in forest sector programs.

So I've submitted examples of reports from this State of Acre in Brazil detailing their comprehensive safeguards monitoring. Social -- sorry, slowing tropical deforestation is urgent. And I will say that the rest of the world is watching and will follow California's lead.

Endorsing this standard now is likely to help support development of other markets and sources of financing for forest sector programs beyond your actions. And delaying endorsement may lead to less strong standards being adopted by others. So we urge you to endorse it without delay.

Thank you.

CHAIR NICHOLS: Thank you.

MR. JANSON-SMITH: Good morning. My name is Toby Janson-Smith. I'm the chief innovation officer at VERRA, a nonprofit organization that manages one of California's offset project registries. And we also manage the verified carbon standard, which is the leading carbon acting framework for REDD+ projects.

Based on our decade-long experience of working with government programs and hundreds of REDD+ projects, or over 100 REDD+ projects, in dozens of countries, I can unequivocally say that with the right standards, REDD+ activities can generate emission reductions that are real, additional, verifiable, permanent, and enforceable, basically meeting what California would need for its own mechanisms here.

Also, I served as a founding member on the California REDD Offset Working Group. That was a two-year process including broad multi-stakeholder consultation that resulted in recommendations that have been incorporated into the Tropical Forest Standard.

And based on all my experience of 15 years working on REDD+ standards, I can say that the Tropical Forest Standard is written in a way that will ensure that only the highest quality emission reductions from REDD are credited, and from activities that actually protect and benefit indigenous peoples and local communities.

Finally, as the previous speaker mentioned, I'd like to say that the whole world's tropical forest nations and states are watching California. If the Air Resources Board were to endorse the tropical forest standard, it would send a clear signal that tropical forests are worth more standing than liquidated. That would have a

tremendous and immediate impact on the land management decisions that many of these countries are about to make, and whether they should protect and conserve their forests, and keep the carbon on the ground rather than in the atmosphere.

Thank you.

CHAIR NICHOLS: Thank you.

MS. META SMITH: Hi. My name is Erica Smith.

I'm a Registered Professional Forester in the State of
California, as well as I'm a forester to Terra Global

Capital. I have here today testimony from a community
organization in Malwai that is currently protecting
tropical forests in Africa. We can see what he's doing
currently with carbon finance.

(Video testimony)

THE WITNESS: (Inaudible) -- and the area of 700,000 hectares of (uninteligible), which of course again in terms of improving the lives of 400,000 people and these communities that are in the number 400,000, they really support the program, because it really benefits them, and the -- how does it benefit them? It benefits them in terms of improving their livelihoods, as well as a look at the health, cities, income-generating activities, and also in (uninteligble) activities.

We really encourage you there in California to

support the program, because it is really beneficial. We have an example of the community of 400,000 people that really supports the program here in (uninteligble) and the YouTube should also support it there by supporting the Tropical Forest Standards and the six. We thank you there --

CHAIR NICHOLS: I'm going to ask you to pause that.

MS. META SMITH: Thank you very much.

CHAIR NICHOLS: All right. Thank you. I know the technology was awkward. We do have your written testimony though.

MR. HRUBES: Chair Nichols and members of the Air Resources Board. My name is Robert Hrubes. I'm a California Registered Professional Forester. I'm also the Executive Vice President of Emeritus of SCS Global Services. And if I were any good at retirement, I wouldn't be standing here right now, but I'm trying.

SCS has been in business for forever 30 years.

And our niche in life is to act as a third-party auditing firm, and a broad array of environmental and natural resource disciplines and programs, including forest carbon offset verification.

Over the years, we have verified over 100 projects totaling over 160 million tons of greenhouse gas

emission reductions. We have submitted written comments, and so I'll be very brief in the interests of time.

I personally, and SCS as an organization, a California-based benefit corporation, strongly supports the California Tropical Forest Standard. And we indeed urge the Air Resources Board to endorse that standard.

Thank you for your time.

MS. DURSCHINGER: Good morning, Chair Nichols,
Board, CARB team. My name is Leslie Durschinger, I am the
founder and CEO Terra Global Capital. Terra is woman-run
women-owned for-profit social enterprise based here in
California. We have been in existence more than 12 years.
We have provide design and implementation support and
investment capital for sustainable landscape programs
globally, working both in the U.S., and we've worked in
over 28 countries globally.

Our focus is really on helping reduce deforestation and degradation while improving community incomes. The work we've done has spanned everything from pioneering the authoring of greenhouse gas protocols and standards through training and community engagement on designing and implementing activities that address drivers, agents, and underlying causes of deforestation, and now pioneering ways to attract private capital to help community groups and governments actually reduce

deforestation and create a new role for rural development.

We thank ARB for their pioneering work. It's been a long road. We've been involved with you off and on for that whole time period.

And it's California itself and what ARB does is one of the only reasons we can hold our head high when we travel outside of the country. We often joke about being the Republic of California.

We endorse the California Tropical Forestry

Standard, as it has -- takes the first step in providing

potential finance to flow into communities who reduce

deforestation and degradation.

It is one of the most important steps. It will signal globally how climate finance could be structured. And in our public comments, we provide a number of technical comments on the standard, but the standard is really good. When it came out we were quite surprised, and were very thankful.

All standards can be -- take time to be operationalized. We encourage you to approve the standard and realize that it's a step in the right direction, a large step for our communities around the world.

Thank you.

2.4

CHAIR NICHOLS: Thank you.

MR. HERNANDEZ: Pedro Hernandez with Leadership

Counsel for Justice and Accountability. We're a California-based environmental justice nonprofit that works with rural and low income communities from as north in the valley as Merced County, as far down as Kern County, as well as the Eastern Coachella Valley.

We're here to ask the CARB Board to not endorse the Tropical Forest Standard, and also not enforce a carbon market-based system that has failed many refinery communities, including many communities in the San Joaquin Valley.

There's been some previous conversations on the Board just this morning about mistakes. And I would consider a mistake, you know, calling somebody you don't know a wrong name. But a mistake on this level would be a disaster. And we just encourage, you know, the CARB Board to really heed the warnings, and also the on-the-ground knowledge of the environmental justice community to develop a better alternative than this.

Thank you.

(Applause.)

MR. JOSEPH: Hello, Madam Chair and Board. My name is Thomas Joseph. I'm member of the Hoopa Valley Tribe of Northern California. And when I came here today, I had all kind of words I wanted to share, but it's changed when I was listening to the Madam Chair who

sounded like she wanted to rubber stamp this because she thinks that we're acting out of fear, or the lady here that presented the -- her presentation that said the word indigenous so many times I couldn't believe it. It was more than the word "the".

(Laughter.)

MR. JOSEPH: We have indigenous people in the room. We don't need non-indigenous people speaking for us. We also need to look at the history of California, and how it relates to indigenous peoples. If we expect this nation -- and I'm speaking to everybody in the room. We have a lot of nations that are here to support this market. I want them to hear these words as well.

My people and my tribe has signed treaties with this government. I've signed treaties with -- agreements with the State of California where California has admitted that they need to restore our rivers for our salmons, and that they need to allocate funds for that, and they have failed to do that, and they have failed for decades to do that.

So how do we expect this State to comply with the agreements of other indigenous nations from South and Central America when they can't even comply the regulations and the agreements that they made with the indigenous people of this state.

(Cheering.)

MR. JOSEPH: This state also had a -- we -- we're talking about indigenous this and indigenous that from all different areas coming from this room. This state voted one time to recognize the indigenous people when it became a state, when took it from Mexico, and it failed by one vote.

So I know the hearts of this -- of the city -- I know the hearts of the citizens of this state are deep and compassionate, and have a deep love for the people of this world and this earth. But what you guys have done is you guys are continuing to plague this nation, to plague this state and our world with colonialization, and you're guilty of it. Everybody at this table and everybody at the table over there.

And we kind find ourself in a crazy predicament like one time in Germany when you're walking outside and you're actually breathing dead bodies because of genocide.

That happened to us today. We walked outside our houses to come to this meeting and we're bringing something -- we're breathing so much smoke. And then you read the newspaper where there's 60 -- over 64 bodies have died and hundreds are missing. We're in that state because of the failed direction of the people that lead this Board, that lead this state, and have lead it for

decades.

And if your proposal is to continue to follow the path and to continue to continue the colonialize and to commit genocide, or to sell out and divide communities -- you're dividing indigenous communities in the south and saying do you want this money, or do you want your trees?

This policy is making that division. It's making that division amongst yourselves. You guys are brilliant scientists. You guys are -- you know what you're doing, but even you are split. That's what we're dealing with. We are in that predicament.

And so it takes all of us, just like we're all affected by we're breathing these dead bodies when we go outside. It is all our responsibility. Everybody in this room, including the people on this table or that one to make the right choice, and to know that the indigenous airs and our skies are not for sale. And we do have the ancestral knowledge --

CHAIR NICHOLS: Thank you.

MR. JOSEPH: -- to lead this nation and to lead this state that's environmentally sound for everybody. We've done it for thousands of years, and we can continue to do it. And if this state continues to neglect it, and continues to put citizens of California and citizens of this world in danger because of your neglections, then

give it back to the people that can handle it.

Thank you.

(Cheering.)

(Applause.)

CHAIR NICHOLS: Your time is up.

Mr. Mason.

MR. MASON: Good afternoon, Madam Chair, members of the Board. Paul Mason. I'm going to be brief, because I don't actually have an organizational position on this issue.

A friend of mine Dr. Andrea Tuttle, was unable to be here today. And I think she got her written comments in late, so I just wanted to draw those to your attention. Some of you know Dr. Tuttle from her time as the Director of the Department of Forestry and Fire Protection. She's also been a regular attendee at the Conference of Parties for the last decade or more. She's serial about going to those, where she's really focused in on the development of these sorts of standards for REDD projects.

She was also involved in the early development of the Governors' Climate and Forest Task Force. So she's got a lot of depth on these issues. And so I just really wanted to draw your attention to the comments. I resubmitted those this morning, in case they were late previously, that her bottom line is, if not ARB, who?

These are good. There is going to be need for ongoing oversight and monitoring that -- you know, there are some caveats to go along with her comments, but she was her supportive, and I wanted to make sure that you were aware of that.

Thank you.

CHAIR NICHOLS: Thank you. We'll look for her letter.

Alex --

MS. LEUMER: Leumer.

CHAIR NICHOLS: -- Leumer.

MS. LEUMER: Alex Leumer with The Nature
Conservancy. Thank you to Chairperson Nichols and the
members of the board. The Nature Conservancy strongly
supports this standard and urges the Board to endorse it.

As referenced earlier, the recent IPCC report underscores the importance of keeping temperature increases to no more than 1.5 degrees Celsius. And natural and working lands in California and globally are needed to be part of the solution, if we want to meet this limit.

The Nature Conservancy with other colleagues published a paper in PNES last year outlining how natural and working lands can contribute up to 37 percent of the needed reductions globally for keeping warming under two

degrees Celsius. But to do this, we need to act now.

This standard can be used globally to help reduce
emissions from deforestation and forest degradation. And
it's utility, while it can be used to support reductions
in the Cap-and-Trade Program, is much broader. It can be
used to support a host of policies aimed at addressing

climate change, such as the Low Carbon Fuel Standard, and

It sets a high bar for greenhouse gas accounting, safeguards, grievance mechanisms, transparency, and engagement with local communities. California's leveraged action outside its borders and other sectors, including transportation and energy, and endorsing this standard would have the same effect for another important sector that is critical to fighting climate change.

Many thanks to the ARB staff for its years of work on this. We look forward to continuing to support its efforts and we hope you'll endorse it.

Thank you.

other supply chain policies.

MR. FISHER: Hi. Konrad Fisher on behalf Water Climate Trust. I've studied market and non-market based environmental solutions for more than 20 years, and specifically CDM projects in South Asia and Latin America.

The Tropical Forest Standard contains some very admirable goals. And I sincerely hope we can achieve

them. Unfortunately, ARB will not achieve them -- achieve these goals if it accepts the latest Environmental Analysis and the inadequate response to prior comments from multiple groups.

Forest offsets are among the most difficult emission reductions to quantify and prove additionality. That's why the CDM project verifiers resisted forest offsets for many years. They were among the latest to be approved by the CDM verifiers. Forest offsets are absolutely not cost effective, given their high administrative cost, such as ten years of your time, profiteering by contractors, and the relatively low cost of emission reductions that can be achieved through domestic regulation like here in California, and green infrastructure subsidies.

The method of establishing baselines would create a disincentive for local jurisdictions to enact appropriate laws. Supporting emission reductions in tropical forests is an admirable goal, but outsourcing our own emission reductions will displace native people who existed in the Americas for thousands of years with virtually zero greenhouse gas emission reduct -- emission.

The final EA did not properly analyze alternatives to reach the stated goal. These include California-based regulations and subsidies as a cost

effective alternative to provide verifiable emission reductions providing tropical forest communities legal recourse for harm done to them by U.S. corporations, and new regulations to limit California's consumption of products that destroy tropical forests.

California should not follow a path that has already failed the international community. We have the heart and the economic clout to advance a truly bold alternative and become global climate leaders.

(Applause.)

SISTER WHO WALKS WITH BEARS: Do I get four minutes to speak in my native tongue too?

VICE CHAIR BERG: If you want to repeat it in your native tongue.

SISTER WHO WALKS WITH BEARS: I sure will. Give me four minutes.

VICE CHAIR BERG: No, give her two minutes and then we'll start it over to you can repeat it.

SISTER WHO WALKS WITH BEARS: Okay. Whichever way the colonized way works.

(Speaks in native tongue.)

SISTER WHO WALKS WITH BEARS: I said hello. How are you all relatives. Good day. Thank you for coming from all over, northeast, south and west. My name is Sister Who Walks With Bears. I come from Calaveras

Tuolumne, Yosemite, Sacramento, and Bay Area. Ancient ones on both sides. Thank you.

I, too, was asking around why this words of "indigenous" kept coming up, when not one of you I see here helped us on Indigenous Peoples Day to abolish Columbus Day. Only then should you be in here saying that.

I'm a walking billboard, as you see. That's why
I have this big body. I can't get kidnapped either. This
I don't understand. A visitor on my own land. No. So I
stand with everybody here in solidarity that you're trying
to destroy our land.

I'm the co-owner MAGIC, Medicinal Anarchy Gardens Inspiring Communities. We teach how to rain catchment, wind turbines, vertical gardening. My people, my ancestors never had to have the government come in to tell us how to maintain our forests or our lands. The government did this and got lots of money for that. And now that it has been raped, you're still wanting to spend more money.

Ask us. Ask us how to take care of our sacred Mother Earth all across Turtle Island. It's that easy. You don't even have to pay me hundreds of thousands of dollars. It's all about money. Does that -- does that get your attention? I'm talking about money here, that

all green that you guys like.

We preserve life. Our sacred life givers, our children, our elders, the four-legged, the winged ones, the creepy-crawlies, the ones that swim in the waters, our star nation, our plant people, our standing up people, which is the trees and our stone people, and our true spirit.

Listen to the indigenous people. Don't go behind these doors in your meetings. Ask us how to fix this.

It's not about that money. It's about our land.

Oh to all my relations.

(Ohs.)

VICE CHAIR BERG: Thank you, ma'am.

MR. BARKER: Hi. I see my name up there. It's not Dan Baihef. I guess my handwriting is really terrible, but it's Dan Barker.

I'm an investigative journalist that focuses on water, the environment, climate justice, and big oil's control of the regulatory apparatus here in California and throughout the world.

I will be real brief. It's very clear, as a journalist, sitting and listening to this meeting, that you -- that the Board or that the staff is -- and the Board are voting on something today that hasn't been fully vetted with all -- with the indigenous communities of this

state and the world, and secondly, a large number of scientists who issued a letter against this.

I urge you not to vote for this Tropical Forest Standard. It's a neo-liberal policy that will dispossess indigenous people, communities, throughout California and the planet. And we -- we can't solve the problem with a false solution like carbon trading and pollution trading.

We have to actually deal with the problem. And as we see here today, people are coming in with face masks, people have been enduring breathing, you know, dead people, and dead trees, and communities. We see the impacts of the type of policies that California has been putting into action.

So I urge you to vote no against this Tropical Forest Standard. Thank you very much.

(Ohs.)

(Applause.)

MS. MELTON: Good morning, Vice Chair Berg, members of the Board, ARB staff. Jessica Melton on behalf of Pacific Gas and Electric Company.

(Hissing.)

MS. MELTON: PG&E would like to thank the Air Resources Board for its leadership in addressing global climate change and advancing efforts that preserve tropical forests. We strongly support the Tropical Forest

Standard, and believe it is an important step to reducing global GHG emissions from deforestation and sends a clear message that sustainable forest management is an important step to our ambitious climate goals.

As stated in the Intergovernmental Panel on Climate Change report, tropical forest management practices play a crucial role in mitigating the effects of climate change by stabilizing greenhouse gas concentrations, while also providing sustainable development objectives that seek to reduce environmental, social, and economic burdens.

We think the REDD+ SCS equivalent social and environmental safeguards included in this standard will help ensure net positive benefits and transparency with implementation of tropical forest emissions reductions projects.

PG&E believes that adopting this standard will provide a gold standard for compliance carbon markets to reduce tropical deforestation and would provide a model that is easily replicated by others.

We appreciate the opportunity to provide support for the standard and thank you again your time.

(Speaking from audience.)

VICE CHAIR BERG: Thank you. I'd like to -- I'd like to -- please, we -- we're not going to have any

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1
    outbursts. Everybody has a right to testify, even if you
    don't --
 2
 3
             (Speaking from audience.)
 4
             VICE CHAIR BERG: Okay. I'm going to ask the
5
    officer in the back to start removing people, if we just
6
    can't allow people to testify. So, please, let's just
7
   please do that.
8
             (Speaking from audience.)
9
             VICE CHAIR BERG: Secondly, we have had a request
    for people to give their time to other speakers. Because
10
11
    we didn't start that way, we're not going to change in the
12
   middle. Everybody who has signed up to speak we're happy
13
    to have them speak, but there won't be extra granted to
14
   people, because they say they're speaking on behalf of two
15
    people. And that makes sure to keep it fair.
16
             So I just want to let people know that.
17
             (Speaking from audience.)
18
             VICE CHAIR BERG: They need to speak on their
19
    own.
20
             (Speaking from audience.)
21
             VICE CHAIR BERG: No, they need to speak on their
22
    own.
23
             Everybody can speak on their own.
                                                 They're on the
           We'll be happy to hear from them.
24
25
             (Speaking from audience.)
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1
             BOARD MEMBER TAKVORIAN: Sandy, I understand that
    they: --
 2
 3
             (Speaking from audience.)
             BOARD MEMBER TAKVORIAN: Sandy --
 4
5
             (Speaking from audience.)
6
             VICE CHAIR BERG: We're willing to -- we're
7
    willing to give them that extra time, so that they can
8
    speak.
            That's no problem. We want to hear from
9
    everybody, but we're going to keep the process, so that --
10
    so it's a --
11
             BOARD MEMBER TAKVORIAN: Vice Chair Berg?
12
             VICE CHAIR BERG: -- everybody gets to speak.
13
             BOARD MEMBER TAKVORIAN: Vice Chair Berg?
14
             I'm sorry to interrupt you. I was here when
15
   people were submitting their slips, and they were telling
16
    the clerk that's what they wanted to do. So they noted --
17
    it isn't something that just came up. So I believe that
18
    folks understood that that was the process, that they
19
    could give their slips and have their time ceded. So I
20
    think people thought that was the process from the
21
   beginning.
22
             BOARD MEMBER SERNA: But the question is did the
23
    Clerk okay it?
2.4
             VICE CHAIR BERG: Yeah, but the clerk didn't okay
25
    it. And so we're -- we're just going to go through.
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(Speaking from audience.)
1
             (Thereupon a discussion occurred off the record.)
 2
 3
             VICE CHAIR BERG: Well, they're changing the
 4
    rules on me now.
5
             (Speaking from audience.)
 6
             (Thereupon a discussion occurred off the record.)
7
             VICE CHAIR BERG: Thank you. Could you just hand
8
    it to the person there.
9
             CHIEF COUNSEL PETER: Can we -- Madam Chair --
10
    Madam Vice Chair. I think we need a break. We can take a
11
    five minute break for the court reporter.
12
             VICE CHAIR BERG: Thank you, ma'am, for bringing
13
    that up to me.
14
             (You're welcome.)
15
             VICE CHAIR BERG: Why don't go ahead -- it has
16
   been suggested -- sir, do you mind if we go ahead and take
17
    a break now? And we will review this, and I'll review it
18
    with Chair Nichols, and we'll come out and let everybody
19
   know what we're doing.
20
             Thank you.
21
             (Thank you.)
22
             VICE CHAIR BERG: You're welcome.
23
             (Off record:
                           12:28 p.m.)
2.4
             (Thereupon a recess was taken.)
25
             (On record: 12:45 p.m.)
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VICE CHAIR BERG: So, ladies and gentlemen -- ladies and gentlemen, let's go ahead and take our seats, please.

CHAIR NICHOLS: We're ready to get started again, please.

VICE CHAIR BERG: Let's please take our seats.

MS. JENSEN: Can you all take your seats, please.

Thank you.

VICE CHAIR BERG: So I personally want to apologize for the little bit of chaos I did -- well, they said I was on.

Am I on now?

Oh, webcast on.

CHIEF COUNSEL PETER: Okay. You're good.

VICE CHAIR BERG: I was just being held up because we're waiting for the webcast.

So what I was saying is first of all, I want to apologize for the little bit of chaos that I did create here. But out of that chaos actually came a lot of organization, as we were able to get together the groups, determine the time, and we'll be able to run the rest of the meeting a lot more efficiently. So thank you very much for letting me know what your understanding was and working with me to get this done. It was never the intention to shut down conversation, but to make sure that

everybody was heard. So I do appreciate that.

So we have our list back up here, and we're going to start with David, who was very patient. And thank you, Dave, for that.

DR. MARVIN: Good afternoon. Thank you to Chair Nichols and members of the Board. I'm Dr. David Marvin, a forest ecologist, remote sensing scientist, and the co-founder of Salo Sciences, a California based forest monitoring company.

Salo maps forest change by combining ecological science, satellite imagery, and artificial intelligence. We're helping governments and NGOs in their conservation and climate change mitigation efforts. My co-founder and I have a combined 25 years experience in ecology and intermode sensing, with a majority of that experience in mapping tropical forests.

I'm here to speak on the readiness of the science and technology behind forest mapping and monitoring. The inability to accurately and transparently map changes in forest carbon has been a major hurdle to tropical forest crediting programs. But over the last decade, there have been tremendous strides in the technology and science for mapping forest change for forest biomass.

First, new commercial satellite companies now provide daily high resolution and global imagery at a

fraction of historical costs.

Second, access to active remote sensing systems, such as radar and LiDAR, has dramatically increased.

These instruments are highly sensitive to forest biomass, enabling direct measurements of carbon gain and loss.

Third, artificial intelligence algorithms have advanced to the point reliable identification of forest loss is both timely and extremely precise.

Finally, low-cost cloud-computing network resources have enabled rapid satellite-based mapping and monitoring at unprecedented scale. These advances now allow the accurate and transparent monitoring for forests worldwide in exceptional detail.

Consequently, we strongly encourage the Board to endorse the tropical forest standard. My colleagues and I have all witnessed firsthand from the ground and from the sky the destruction that has been wrought on tropical forests. The world needs action and the world needs leadership.

The California Air Resources Board can continue demonstrating its leadership on issues critical to slowing climate change by endorsing the tropical forest standard.

Thank you for your time.

MS. CHAN: Good afternoon. My name is Charlotta Chan. And I'm research association with Earth Innovation

Institute.

I'd like to call your attention to a letter from Jane Goodall to Chair Nichols in support of the California Tropical Forest Standard.

Jane Goodall writes, "I'm writing to you now because I'm really worried that the world continues to ignore the importance of protecting tropical rain forests in our collective fight to solve the climate crisis. As you well know, protecting and restoring forests can account for as much as one-third of the solution to slowing down climate change. And just as important, by saving and regenerating forests and planting new ones, we buy the time we truly need to allow solar, wind, and other technologies to produce clean green energy.

"I know that thanks to your personal efforts, and those of your California Air Resources Board colleagues, and thanks to Governors Brown and Schwarzenegger, California is undispute -- is an undisputed global leader when it comes to passing impactful legislation to protect our climate.

"Many people around the world are watching California's efforts, and I truly believe that if the State passed the Tropical Forest Standard,

this would send a very important message to advanced economies around the world as to the huge importance of the tropical forest solutions. It would also encourage leaders in government indigenous groups, and civil, society and tropical forest nations as it would indicate that their bold, and for some, dangerous fight to slow the loss and speed the recovery of tropical forests is noticed and appreciated

"It is for all these reasons and more that I really hope that you and your colleagues on the Air Resources Board will endorse the California Tropical Forest Standard. It is a decision that will make a big difference to future generations.

"Yours sincerely. Jane Goodall."

Thank you very much.

CHAIR NICHOLS: Thank you.

MS. CHEN: Hello. My name is Winnie and my four colleagues, Megan, Irene, Laiseng, and Norm will be ceding our time to Marlon Santi.

CHAIR NICHOLS: Okay.

MR. SANTI(through interpreter): Good morning or good afternoon. My name is Marlon Santi and I'm from Kichwa people of the Ecuadorian Amazon and the community of Sarayaku.

It is an honor for me to speak here today on behalf of many indigenous peoples of the Amazon, and also on behalf of the beings and forests of our territory that comprise 2.4 million hectares.

I am also here to respond to the Governor of Pastaza who attended the Governor's Climate Forest Task Force in September and unilaterally put our territories in the carbon markets in a way that violates not just the rights of us as indigenous peoples, but also violates the constitution of Ecuador, and the rights of nature, and the rights of the Amazon.

I have been listening carefully to all the glowing reports about REDD+ and the benefits of the carbon market, and about your desire not to make mistakes. Well, you are already making plenty of very grave mistakes.

(Snapping fingers.)

MR. SANTI(through interpreter): I am saddened to see the residents of Richmond suffering asthma, struggling to breathe because Amazon crude is being refined in Chevron's toxic refiner, and the children and people of the Bay Area are suffering because the quality of the air is terrible.

These situations in and of themselves constitute systematic and systemic and massive human rights violations here in California.

(Noise from audience.)

MR. SANTI(through interpreter): Nowhere in the Tropical Forest Standard that is under consideration is there any mention of the human rights of the children of California.

(Applause.)

2.4

(Noise from audience.)

MR. SANTI(through interpreter): But human rights have to be the first priority of human beings. And we also have to ensure that the lands and the sweet rain forests, and the lagoons that do give us oxygen, and clean air, are not privatized and put into the carbon market, because that too is a violation of our human rights.

(Applause.)

(Noise from audience.)

MR. SANTI(through interpreter): So we need to see who is mistaken. Let's look at the historic record. Fifty years ago, we were told that oil was the answer to all of our problems, and that it was going to bring wealth and good lives to our peoples. But now it's perfectly clear that burning fossil fuels is what has caused the climate crisis, and why here in California it's so hard for so many residents to breathe.

And why is it that the politicians and governments are not passing laws to cut oils from being

burnt? Why are not the polluters being forced to stop destroying the earth?

A month ago, we sent a letter to Governor Jerry Brown, and we have yet to receive a response. And in that letter, we denounced the hypocrisy of carbon markets. And this is not just an issue for indigenous peoples. It's an indigenous for all of humanity.

And so on behalf of humanity, I urge you to not adopt this so-called forest -- Tropical Forest Standard, because it violates and rapes Mother Earth. It violates human rights. It violates the rights of indigenous peoples. And governments were created for something else that is not violating human rights.

Thank you.

(Applause.)

(Noise from audience.)

CHAIR NICHOLS: Is our next speaker here?

There's another group -- what happened to I -- I see.

MR. CONANT: Thank you. A number of us, as you see above, will be ceding our time to Chief Ninawa Huni Kui from Acre, Brazil.

CHAIR NICHOLS: Got it. Thank you.

CHIEF NINAWA HUNI KUI(throug interpreter): On behalf of my ancestors and behalf of the spirits of the rain forest, I'd like to thank the Chair and the members

of the Board, and my friends here who have given me their time to speak.

2.4

This is not the first time that I'm at hearing at the California Air Resources Board. In fact, it's the second time I am here. And I am here to speak with my true voice. I am here to speak from my heart. My name is Ninawa, and I am from the Brazilian Amazon in the State of Acre, Brazil. And I am the President of the Huni Kui people.

And so I represent 13,000 people, and I'm here to say that talking about climate change is an important undertaking, but we should talk about climate change honestly. And there's been a lot of lies this morning.

REDD, REDD+, carbon offsets, are false solutions to climate change. They do not reduce emissions. What they do do is create division in indigenous communities. And I believe from what I'm seeing here today, they also create division amongst yourselves.

REDD violates human rights. For example, the representative of the Government of the State of Acre, Brazil said, oh, yes, we've gotten the free, prior, informed of indigenous peoples to move forward with this forest -- tropical forest standard. And it's a lie.

Convention 169 of the International Labor
Organization, which enshrines indigenous people's rights

to free, prior, informed consent has been violated in every possible way in this process. There are these sham meetings where a little handful of hand-picked people get together, and they call that a consultation with indigenous peoples. Nobody has been to my village to ask my opinion about this.

So you want to save the planet. Good idea.

Reduce emissions at source, because I'm seeing that there are people here in California who cannot breathe clean air. There are fenceline communities that are breathing pollution and their health is suffering.

Other lies. We know that REDD does not reduce admissions at source. What you need to do is have polluters cut their pollution where they're polluting. That's the solution. Somebody else here in this hearing was saying that indigenous peoples are drivers of deforestation and responsible for climate change. That's another lie. You could go check out the refineries, right, and see. Those are the ones that are causing climate change, not indigenous peoples.

So just in closing, I'd like to say that it's important to realize that if you adopt the tropical forest standard you're privatizing the forest, but you're also privatizing the life of the people who live in that forest.

You say, oh, it's just a norm. It's not law, but then why is the whole world saying that it's a signal for including forests in the carbon market?

I am here to today to ask you to re -- to reject the Tropical Forest Standard, and I also am here to invite you to do some more homework, get some more information.

Don't talk to some Indians living in the city. Come to my village, talk with me. You are cordially invited to my territory.

(Applause.)

(Cheering.)

Visit us. It will help you see through the lies you've been hearing this morning. Come visit us, so you can embrace the truth. Come visit us, so that you can see clearly that the Tropical Forest Standard is nothing more and nothing less than colonialism.

Come visit us so you can embrace the truth that the Tropical Forest Standard will cause genocide in the future.

21 MS. SMITHIES: It's nothing to smile about, 22 Chair.

CHIEF NINAWA HUNI KUI(throug interpreter): I ask you to embrace the truth. Thank you.

(Applause.)

(Cheering.)

MS. ORTEGA(through interpreter): Good afternoon, Madam Chair, members of the Board. I greet you and I hail the authority of the ancestors and memory of the indigenous peoples of these lands. I also want to hail the 120,000 trees that have been burnt in the recent fires, the animals, and insects that have been incinerated. And I also want to hail the beings that now fly in the air that we breathe and become a part of us as we exhale and inhale.

Madam Nichols, and all the other members of the Board, I am here today to show you my respect and to share with you the authorities that I respond to in Mexico. And in that regard, I'm here today to tell you that the Tropical Forest Standard is illegal.

I work for the Center for Change in Rural Mexico and I was born in Chiapas. And I am here on behalf of the Mexican people to say that you must cancel, you must reject the Tropical Forest Standard, as well as the memorandums of understanding that you have signed with the states of Mexico, because they violate -- they violate the first article of the Mexican Constitution, which enshrines the human rights of Mexican citizens.

The norm, the standard, and all the other policy work on REDD+ and forest carbon offsets that you have been

working on violates indigenous people's and peasants'
rights to our territories and lands. My center has
systematically done case studies on everyone of the pilot
REDD+ projects in Mexico, and I am here today to tell you
that free, prior, informed consent has not been granted in
not one of those projects.

I'm also here today to tell you that not only the is Article 1 of the Mexican Constitution violated by the policies to promote, be they standards or other kinds of policies to promote carbon offsets, but they also violate Article 2 of the Mexican Constitution, which enshrines the sacred and fundamental right to the self-determination of indigenous peoples.

(Ohs.)

MS. ORTEGA(through interpreter): So each of the carbon offset projects that have been done in protected areas, in the buffer zones of protected areas in Mexico have actually been compounded human rights violations that were already existing. These REDD+ plus and these REDD type projects are done on top of areas where there has already been very grave violations of human rights. And The Nature Conservancy and Pronatura, which is a Mexican NGO that works on carbon offsets, knows that well. And they cannot prove to you, nor to us, that they have the --received the free, prior, informed consent to do their

pilot projects.

And while I'm here, I would really like to suggest that the State of California, as well as the United States of America, make haste to ratify the Convention on 169 of the International Labor Organization, because it's pretty clear that you do not understand very much about indigenous peoples, and indigenous people's rights.

For example, for over 10,000 years, indigenous peoples have been strengthening our historic memory and traditional knowledge systems to put your breakfast on your plate. I'm talking about coffee. I'm talking about corn. I'm talking about the food that you have in your belly right now. That is thanks to indigenous peoples. That is thanks to our sacred knowledge. That is thanks to our reverence for Mother Earth. And all of that is destroyed by carbon offset projects.

This priceless wisdom that feeds all of humanity must not be destroyed. The sweetness of the fruits that you enjoy is all threatened by REDD+.

And so with love, indigenous peoples for thousands of years have taken care of forests. And we've done it with our whole heart. And we are the experts about taking care of forests, and we are also gifted with a vision of the future, and knowledge about how to really

address climate change and heal the earth. And there can be no future for humanity without indigenous peoples.

And, hello, I am here today to say that carbon markets and this proposed Tropical Forest Standard threatens indigenous peoples very survival. It does not reduce greenhouse gases emissions, and it restricts our access to our land and territories, and it violates the Mexican Constitution, and with all due respect, it also violates the sovereignty of the peoples of Mexico, and, in fact, the peoples of the world.

Thank you.

CHAIR NICHOLS: Excuse me. Excuse me. Excuse me, Madam. Madam, before you leave. Wait. Hold on just a second. We have a question before you -- Madam Speaker.

We have a question.

BOARD MEMBER DE LA TORRE: (Spoke in Spanish.)

So I wanted to clarify in her comments on a number of occasions, she said that we, the State of California, this Board, have taken action to implement REDD in another places, and that we've been doing this for about ten years.

And I just clarified that we have never taken that action. The State of California has never implemented REDD anywhere or authorized REDD anywhere.

Thank you.

MS. ORTEGA(through interpreter): May I respond?

Be so kind, Mr. Hector De La Torre, to put what
you just said in writing, because the states where we live
and the countries where we live are completely being
incentivized by what CARB is doing to push forest offsets
by a variety of names, whether it's REDD+ or something
else. So if you could take responsibility to put in
writing what you just said, I would be so grateful,
because regardless of whether these projects are done
specifically with the name R-E-D-D Plus or with some other
buzz word, what we're seeing is that the whole package of
the carbon market economy is destructive and harmful. And
any kind of policy or norm that furthers it is also
harmful for us.

So leave our forests alone. Leave our air alone. We -- let us decide for ourselves. Do not continue to divide us with your norms and policy. The future of the planet depends on this, on the forests. And the majority of the forests are in indigenous people's territories. And that is not a coincidence. It's because our sacred indigenous ways of living and taking care of their -- these forests have meant that these forests are still with us.

And so that's the bottom line. We are the ones who know how to conserve forests. There's not one project

that doesn't involve indigenous peoples that has actually restored forests, but we do have evidence of how indigenous peoples know how to restore forests and take care of them. And so that's why the majority of forests are still found in our lands and territories.

And the United States knows full well that the majority of biodiversity is also in our lands and territories. So I look forward to receiving that document with your comment in writing. Thank you so much.

We're -- we would be so happy to go home and share that with our governments. Maybe they would stop violating our rights with these projects.

(Applause.)

2.4

(Cheering.)

BOARD MEMBER DE LA TORRE: Thank you.

(Spoke in Spanish.)

I said that in the last ten years, five years, one year, this Board has never taken the action that she claimed we did.

Thank you very much.

MS. ORTEGA(through interpreter): Thank you so much for the extra time. You need to know that you are negotiating with provinces of Mexico, and that the Government of Mexico is responsible for the disappearance -- the murder and disappearance that is of

over 37,000 Mexicans. There is an undeclared war against environmental defenders, and indigenous environmental defenders, including the 33 students from a forested area who were brutally murdered. So do not do business, do not sign memorandums of understanding with the Mexican government, because it is a murdering state.

(Ohs.)

CHAIR NICHOLS: Do you want to say --

ASSEMBLY MEMBER GARCIA: Yeah, thank you, Madam Chair and thank you Board Member De La Torre for the clarification.

I think there's some loss in the translation. With all due respect to the individual who's translating, the sensationalization and animation --

CHAIR NICHOLS: Yes.

CHAIR NICHOLS: Yes.

ASSEMBLY MEMBER GARCIA: -- is not conveying clearly the comments that are being made. And so I've sat here for a little bit and tried to be respectful to the individual volunteering probably in translating. But I don't think that it does much justice to the individuals speaking in their native language. And therefore, I would like to suggest or recommend -- I don't know if we have someone that can translate for those speaking in Spanish, particularly, that is not associated with the group --

ASSEMBLY MEMBER GARCIA: -- where I think the sensationalization and animation that's coming with the translation is losing the significance of the points that are being made.

I've sat here and listened to several people -I've sat here and listened to translation for several
folks who have spoken in Spanish and the translation has
not been 98 percent accurate.

(Speaking from audience.)

ASSEMBLY MEMBER GARCIA: So I just wanted to make that suggestion, Madam Chair.

CHAIR NICHOLS: We have a translator here, who could stand with whoever is speaking.

MS. SMITHIES: Yes. I think at this point, it would be appropriate for me to present myself and my credentials. My name is Cassandra Smithies. And I have worked over the years as a consultant for the United Nations. I have also interpreted for heads of States, several Secretary Generals of the United Nations, movie stars, ministers, working class heroes, the David Letterman Show.

So I think that actually my credentials are very much in order. And I object to your actually partisan critique of my professional service. And I think we should just leave it at that.

But I do believe that there are no longer any Spanish Portuguese speakers from our delegations, so we could move forward and enjoy the message and truth of our colleagues from Nigeria.

Thank you very much.

(Applause.)

ASSEMBLY MEMBER GARCIA: Thank you. Thank you for sharing. By no means did we question your credentials. I questioned the direct translation that you've been making on behalf of some of the Spanish speakers that is not reflective exactly to the points that have been made.

So I apologize if you feel that your credentials were questioned. But in the interests of time, I will yield back to the Chair and make that suggestion moving forward for future translations.

Thank you.

CHAIR NICHOLS: Thank you. I've never had a translator tell me to stop smiling before.

Go ahead.

MS. SMITHIES: I've never seen anybody smile about genocide before.

(Applause.)

CHAIR NICHOLS: Nobody, nobody has smiled about genocide. That's ridiculous.

Go ahead, sir.

MR. OSUOKA: Thank you, Madam Chair and members of the Board.

As you've already heard, I come from Nigeria, where I'm the director of an organization called Social Action. So I thank you for the privilege to allow me to come here and testify.

In Nigeria our organization work very closely with communities in the forest of Cross River State. And I live in the City of Port Harcourt, which is the capital of the oil and gas industry in Nigeria, so I am used to wearing masks because of the gas flaring by companies, such as Chevron, which I understand has its headquarters here. I didn't expect to come to California and wear masks on the street.

However, I breathed a bit of fresh air when I got into this room, and I listened to the Chair, and I listened to the representatives of the agencies that spoke during the first session, on natural and working lands implementation plan of California. I had, and I felt a deep sense of appreciation of the enormity of the problems that we are dealing with.

I come from Nigeria and we hear from President

Trump the skepticism and, in many ways, the

irresponsibility expressed by President Trump is countered

by the acceptance that we have seen here. Madam Chair talked about ridiculous optimism with reference to the culture of California. And she also talked about the need for looking at the situation with clear eyes, and the need for technical rigor.

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I want to add, while I support all of those, I want to add that we also have to examine the social contexts of the jurisdictions, in particular the subnational jurisdictions that California wants to deal with, with respect to forest offsets -- carbon offsets.

I want to say that if we examine the social context, we will understand why the word "colonialism" has been used in some of the testimonies here. Colonialism involves the control of the lands, the resources, and the abuses of the rights of the peoples in one territory or jurisdiction for the satisfaction of the needs and desires of corporations and governments in another territory or jurisdiction.

The California Tropical Forest Standard is a colonial instrument that threatens the very survival of the human rights of communities and peoples in the global south whose lands and resources will not be kept for the sole purpose of setting emissions of greenhouse gases from California.

There is, of course, the argument that can be

made that this is not colonialism. Whatever has been proposed will be based on contracts between California and other subnational jurisdictions in the global south, in the tropical world, where we know that with respect to trans-atlantic slavery, there are those that argue that it is not the fault of Europe, it's not the fault of North America, because there are African slave traders that were involved in selling slaves.

Today, I was looking at the website of your board, later yesterday, and I've seen the letter of recommendation, endorsement by the Government of Cross River State in Nigeria. And I looked at other letters of recommendation from other jurisdictions and groups from Latin America, and I saw that it is more or less the same letter that has been duplicated. Minor attempts have been made to make some adjustments. It is disgraceful. It is disgraceful.

(Applause.)

MR. OSUOKA: California is associated with action -- positive action in many respects in dealing with the problem of climate change, particularly in the United States, where the federal governments have been particularly slow.

The example that California should show to the world is that it is possible to take action to reduce and

mitigate emissions at source. And in many ways you have done that, and the records are there. The plans are there. There is optimism. There's hope. I come from Nigeria, and I have a copy of formal complaints that have been made by communities of Cross River State, those communities that are dependent on the forests of Cross River State.

The moment they had that their forests have been linked to a scheme in California, there were scared. They were enraged. And they quickly organized themselves to complain to the Public Complaints Commission in Nigeria. And I understand that a copy of this complaint has been forwarded to your Board.

Madam Chair, I had testimonies from representatives of UNDP. Today, the UNDP, the United Nations Framework Convention on Climate Change do not have any reputation in the Niger Delta Nigeria or in the Cross River State area, because the UN has promoted REDD in Cross River State. And the UN has written standards, safeguards, including regulations for participation of committee members.

But in several ways, they have failed woefully.

Woefully, in walk -- and abandoned by their own standards.

The communities in Cross River State that are victims,

victims of REDD have not been consulted by the UN.

There's a danger, Madam Chair, that California will be grouped along with the UN as promoters of negative schemes that have led to the criminalization of poor community folks who are struggling to live with air resources without harming the forests.

Today, we are particularly concerned that the California Tropical Forest Standard will apply to subnational jurisdictions implementing judicial scale carbon credit schemes that -- part of that is a quote of your own document.

So now as the first initiative globally, this
State of California is not just setting the standard, but
is introducing a treated mechanism among subnational
entities that are not signatories to international human
rights instruments.

It will be very reckless to introduce carbon trading arrangements involving the locking down of the lands with adverse implications for the livelihoods and human rights of communities globally by subnational entities that are not signatories to international human rights instruments.

With the example of Nigeria, which is the main -the main -- the foremost pilot scheme of REDD in Africa.

Members of communities are being -- already being denied
of their access to nutrition, because of REDD. Committee

members that depend on the leaves from the forested trees are part of the staples of their diet, are now prevented from accessing their forests.

Community members that depend on the forests to pick snails, large snails, a source of protein, and I've been denied access to pick snails from their forests.

However, we see that from the research that we have done in Cross River State, that even with the attempts of the forest police that have been created, the so-called tax force on REDD, logging has not stopped. What the REDD+ scheme has contributed successfully in doing is to raise the price of timber. And by raising the price of timber, there is now a real market incentive for illegal logging.

And we all know that Nigeria is one of the most corrupt countries on it. And Cross River State government is not immune.

CHAIR NICHOLS: Thank you. Please yield the platform to others who want to speak.

MR. OSUOKA: The Cross River State government is in fact, in the case of Nigeria, the worst threat to the forests. Today, the Cross River State government is planning to build a super highway through the forests. Even the Nigerian Federal Minister of our Government has went to court to stop the project. That is how

destructive the Cross River State government -- these are subnational entities that the California -- the State of California intends to do business through this scheme.

CHAIR NICHOLS: Sir, we have listened to you carefully and quietly and with respect. And now you need to let others speak.

MR. OSUOKA: Thank you very much.

MS. ENG: Can I cede my time for him, please?

CHAIR NICHOLS: What time -- who are you?

MS. ENG: I'm number 61.

CHAIR NICHOLS: Excuse me?

Sure. Take another two minutes. Why not. Go ahead. Finish up, and take another two minutes.

MS. ENG: Thank you.

MR. OSUOKA: Thank you very much.

You are -- State of California is dealing with subnational entities with unclear accountability mechanisms. And this is a dangerous precedent that will be set if the California Tropical Forest Standard is endorsed.

I have done -- I have a Ph.D. as an environmentalist from University of Canada. And I've done -- I have experienced researching carbon offset projects in the framework of the CDM, gas flare reduction projects, including claims that have been made by Chevron.

And I know you all know Chevron, because it's company headquartered here. But then we examine all the claims, which satisfied the paperwork, the requirements of paperwork. Real research on the ground was restricted that all the claims were fraudulent, even though at the level of meeting the guidelines they did.

Because of our research, even Chevron withdrew their claim for carbon credits. This is a hazy area that is unclear. These offsets -- cannot, cannot be verified, particularly in the jurisdiction like Cross River States. And I urge you to take the path of caution and not endorse this dangerous, dangerous scheme.

Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

CHAIR NICHOLS: Thank you.

MS. DORSEY: My name is Maria Dorsey. I'm a member of Idle No More S.F. Bay. I come as the voice of victims of climate chaos in Northern California that have no voices in the human language, such as black bear, dear, elk, Sierra Nevada Red Fox, Mojave ground squirrel, honey bees, chinook salmon, the delta smelt, the Shasta red fir, California redwoods, California poppies, big leaf maples, and California coastal sage.

We live in this world with our own purposes given

to us by our creator. We innocently bear our children in our own ways, and we care for our families, have our own individual heart beats and communication, and exist in only the ways that we know how. We are impacted as much as humans are by carbon emission, climate chaos, and suffer in silent, confused, agony. We have no voice, as we quietly begin to disappear, suffocate, and die of dehydration as our food and water sources disappear.

Consider us when you think about your decision today. Remember that all our lives are also at stake. You cannot fool us with the story of carbon trading. It sounds good on paper, but we the living know the truth. It is not a working solution when living beings are still dying at the collusion of corporations and governments fooling the general public into thinking carbon trading and offsets are green and environmentally progressive, when reality says they're praying on indigenous communities, forests, land, air and water, and all of their non-human relatives with utterly false solutions.

I, and all of our relatives, are pleading with you to not endorse the tropical offset standard and truly be the climate leader California pretends to be, since everyone seems to be saying that the world is watching.

The fierceness of our relatives from the south is brilliantly conveyed to try and make you understand that

this is not just a pretty green project for California to pat their back with. People are dying from carbon offset programs, and cannot be allowed to proceed with good conscience in the very end.

Thank you.

(Applause.)

MS. JOHNSON: Hi. I am Janet Johnson from Richmond and I am ceding my time to Tom Goldtooth.

Thank you.

MR. GOLDTOOTH: (Spoke in native tongue.)

Hello, my relations.

Madam Chair, Mary Nichols, Board members of the California Air Resources Board and to the indigenous spirits of these territories that are still active. My name is Tom Goldtooth Executive Director of the Indigenous Environmental Network formed in 1990. Since 1998, I have been involved in climate change mitigation, and adaptation policy issues from an indigenous perspective, and in close consultation with grassroots indigenous peoples from tropical forested regions, and of the north, including the arctic region.

Our network has reviewed the proposed tropical forest standard. As my time is limited, I will be brief on a couple key points. If the tropical forest standard is approved, it would outsource California's

responsibilities for human rights abuses and threats to the cultural survival of indigenous peoples. It will become a model for expanding the market and implementation of carbon offset projects in countries, not just at the subnational jurisdictional level, but will become a door opener at the national and international levels.

I come from the long history of the environmental justice movement. One issue we have always fought for is the right of communities impacted by governmental decisions, and policies, whether they are guidance documents, standards, or regulatory policies, to be consulted on the principles of free, prior and informed consent.

There has been no meaningful participation and no adequate consultation of indigenous peoples in forested dependent communities on the impact of this proposed Tropical Forest Standard. Carbon forest offset contracts such as these pilot -- these REDD pilot projects are already resulting in land grabs, harassment, threats of violence, and evictions of forest-dependent communities in the global south.

There are many cases already where forest offset projects in developing countries are violating the human rights and the rights of indigenous peoples. There is still debate globally on carbon accounting, and on a

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mechanism for monitoring reporting and verification on
1
    offsets and carbon trading.
 2
 3
             There is over 100 percent margin of error for
 4
    measuring forest carbon sequestration according to the UN
5
    Panel, the Intergovernmental Panel on Climate Change.
6
    That is over 100 percent a being wrong. Our network of
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    indigenous peoples from the south and north are asking
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    CARB to reject the tribal forest -- I mean, the tropical
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    forest standard.
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             Board members, our air is not for sale.
11
    Earth and Father Sky is not for trade. We, as indigenous
   peoples, have real solutions, keep fossil fuels in the
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13
    ground.
14
             Thank you.
15
             (Ohs.)
16
             (Applause.)
17
             (Cheering.)
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             MS. ZEISER: Hi. I'm Mary Zeiser and I'll pass
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    on to the next person.
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             CHAIR NICHOLS: Okay. Are you next?
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             MR. SALDAMANDO: I'm next, but there's -- oh, I'm
22
    sorry. I was waiting for the green light.
23
             CHAIR NICHOLS: Oh, it's on.
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I'm a human rights lawyer. I've been practicing

MR. SALDAMANDO: My name is Alberto Saldamando.

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international human rights at the international level for over 30 years. I was involved in he negotiations with the declaration of rights of indigenous peoples, as well as actually a peace of ILO 169. It has been mentioned here Mexico, Brazil, other -- most Latin America is a State party to the ILO 169, which requires consultations leading to consent whenever any action is taken by the State that will affect indigenous peoples.

And that internationally has been -- has meant consultation with the people affected, not mass meetings, not the other kinds of meetings that have been described by the states here, but with the peoples themselves. And that's really part of the problem.

It's not a known concept in the United States.

Free, prior and informed consent is not -- does not exist in the United States. There is no -- there is not requirement under any law. There is a requirement for consultation, but not consent with the National Historic Preservation Act. That can be a recommendation, not by indigenous peoples, but by the Commission on National and Historic Places.

But internationally we saw it when we were negotiating it as an end to colonialism. That is before they take, they have to ask. And the practice has always been they take first and then your left with the

consequences.

Part of the commentators that have been made to answer, I don't know if Mr. De La Torre, it's not that California has taken direct action in implementing REDDs. California signed a memorandum of understanding ten years ago with Chiapas, with Nigeria, with Cross River States, with other countries. I think with Acre as well, they also have a memorandum of understanding.

That memorandum of understanding really points to what is at fault here. It is that you're drawing attention of big money to indigenous peoples homelands. It's not that you took any affirmative action with regard to the implementation. It's just that all of a sudden, Cross River State Acre, Chiapas saw big money and they started to implement conditions whereby that would be acceptable.

The fact is that I have personal knowledge, and perhaps the lady from Mexico does to, of a community in Mexico ten years ago was denied their medical services because they did not want to join a proposed REDDs program in Mexico at the time. And at the time, it's true, California was not involved in any of that.

But it's the fault of this -- of these Tropical Forest Standards is that they draw attention of big bucks to the people most financially involved.

Like with all due respect to the Chairperson,
Mrs. Nichols, the question is not really if whether or not
forest interests have funded CARB or trips, the question
is who is, in fact, financially interested? It's the
carbon traders that have been represented here. It's the
oil companies that have been represented here. It's the
utilities that have been represented here. It's those
people that do have a financial interest.

So we would urge you to reject these standards.

Thank you.

(Ohs.)

CHAIR NICHOLS: Thank you.

MR. PESHLAKAI: My name is Corey Peshlakai and I will cede my time to Pennie.

MS. OPAL PLANT: Hello, Board, staff, other folks here. My name is Pennie Opal Plant. I'm a founding member of the Idle No More SF Bay, and I'm also a refinery community member -- and I'm a grandmother. And I expect that some of you are either parents or grand parents.

I want to just start out by saying that I respect the land whose territory we're on, the Miwok, the Yahi, the Patwin, and the Maidu. I'm a Native American woman and I've lived in Richmond and San Pablo all of my life.

Every day I see Chevron refinery. And I can tell you that my family and other families are really suffering

right now along the refinery corridor, because not only do we have to deal with the impacts of refinery emissions, but on top of that, we have to deal with the impacts of the fires. We're suffering from eye problems, sinus problems, lung problems. And you folks are the folks responsible for our air in the state of California. It's your responsibility to protect us.

We all know that these killer fires are directly related to climate change. We also know, based on the latest IPCC report on climate, that we must begin the serious business of reducing fossil fuels, of transitioning off of the refine -- out of the refineries that we have. That is the solution to what we're dealing with here, not the tropical forest offsets, or REDD, or any type of carbon trading.

Eventually, it's going to be the State of California's job to transition off of fossil fuels. Well, we only have 12 years to do that, in our area, we deal with BAAQMD and thankfully I have appreciated getting to know John Gioia. But because of California regulations and Bill AB 398, we have not been able to get the refinery rules passed that need to be passed to protect our communities. That is something that you can do, that you can direct to have happen.

If there are Stringent refinery rules, then the

fossil fuel industry will have to shift. We know it has to shift. So I'm asking you to be courageous, and do your job, and pass the type of rules that you can to transition the refinery industries out of commission and into a different business model.

As a member of the Idle No More SF Bay, our policy is that we have no human enemy. Our enemies are the thought forms that created separation, colonization, and capitalism. Colonization as historically been utilized to divide and conquer to win, especially in our communities.

You can see by looking in this room, that the type of colonization that the CARB Board is pushing for --forth with the tribal forest -- tropical forest offsets is dividing our indigenous communities. That's on you.

That's on the UN for promoting this. It's another for --just another way of colonizing us to keep us separated, so that big business, big money, and industry can continue to pollute and to continue to make money after off of the carbon trading.

That's not okay with me, and it shouldn't be okay with any of you who are parents or grandparents. We have to be good ancestors right now. It's our job. It's our job to protect the future for those who aren't even born yet. It's your job to do that.

And as a grandmother and a mom, I am asking you to do your job for your own families, to stop, stop fossil fuel.

Thank you.

(Ohs.)

MS. TALL LEE: Good afternoon. My name is Pam
Tall Lee. I am the chairperson of the International
Coalition of Human Rights in the Philippines, U.S., a
founder of the Asian Pacific Environmental Network, and a
contributor to the principles of environmental justice.

I'm a fourth generation Californian -- Chinese in California. Our communities date back to the building of the transcontinental railroad. While proud of the contributions and skills of our people, at the same time, I grieve at the sorrow and the devastation of the building the railroad that it had on the native people.

The railroad ushered in a legacy of environmental racism. The railroad violated the human rights of native people. The railroad violated the sovereign rights of native people. The railroad resulted in the genocide of native people.

I see that the impact of California's market-based solutions, and the implications of this Tropical Forest Standard as being a carbon copy of this historic railroad experience.

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(Applause.) 1 MS. TALL LEE: Therefore, I urge you to reject 2 3 the standard, and please you can do this. Create the 4 human will, the political will to focus on capping emissions at the source. 5 6 (Cheers.) 7 (Applause.) 8 MS. TALL LEE: Regarding safeguards, I have been 9 to the tropical forests of the Philippines. I have spent 10 time, and lived with, and been with the Lumad indigenous 11 people, the protectors of the rain forests in the Philippines. And though it is illegal to kill and jail 12 13 innocent people, I have seen that the Lumad people, the 14 indigenous, the environmental protection of the forests, 15 and of our air, they have been jailed and killed. 16 have been jailed on trumped up charges. They have been 17 killed by the paramilitary hired by corporate families, wealthy families, and corrupt politicians. 18 19 CHAIR NICHOLS: Thank you your time is up, unless 20 others are yielding time to you. 21 MS. TALL LEE: I urge you to please -- safeguards 22 have not protected these people. 23 Thank you.

CHAIR NICHOLS: Thank you.

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1 (Applause.)

MS. EHARA BROWN: (Spoke in native tongue.)

Greetings, relatives.(Spoke in native tongue.)

My Mohawk name is (spoke in native tongue). My

English name is Allison Ehara Brown.

(Spoke in native tongue.) I live in Richmond, which is also known as (spoke in native tongue), which is the Ohlonian name for the lands on which we live.

(Spoke in native tongue.) I'm a mother and a grandmother. I'm speaking to you today as a grandmother and as a mother, as someone who cares deeply about my community, and the Ohlone lands that I live on. I'm speaking to you today, because I'm outraged, and my heart is broken, and I'm appalled at what's being considered here with the Tropical Forest Standards Offsets.

I think there's a way right now with the smoke in the air that we're all getting a taste of what the future could look like in a permanent kind of way for us in California and around the world. And people who live outside of the refinery towns are also getting a taste of the kind of angst and fear that we live so much of our lives with, that we look out at the Chevron refinery, or the Tesoro refinery, or Valero or one of the other refineries in our refinery corridor.

And we look to see is there -- are there

particulate matter issues today, where we need to think about our children's safety? What's the impact today going to be on asthma or on cancer?

We look out with fear, and trepidation, and anger at the lack of decisive courageous action that boards like all of you are taking around really safeguarding our children and the future.

At this point, we really have to, as human beings, step beyond all of the limits and regulations that we spend our time sitting inside of these boxes of rules. We have to take courageous action to put fossil fuels in the ground, keep them in ground, and make the future safe for our children.

CHAIR NICHOLS: Thank you.

MS. EHARA BROWN: I ask you all to please reject the Tropical Forest Standard today, and to stand up for a future for our grandchildren.

Thank you.

(Ohs.)

(Applause.)

MS. FEINSTEIN: Hello. My name is Nancy
Feinstein. And I want to thank you for the time and
thought you each give to public service. And I also want
to say that I'm sincerely honored to bear witness to the
eloquence, brilliance, strength, and persistence of my

relatives who speak against these standards.

I'm afraid my remarks are a bit more homespun. We're all feeling very humbled in this moment of history, as we face the impacts of climate change. May we bring that humility to challenging our assumptions that actions that come from a deep desire and intention to do something good to deal with the implications of climate change means that it is righteous or even ethical to support partial solutions in these moments of climate -- climate crisis.

I'm from an organization Thousand Grandmothers for Future Generations.

(Ohs.)

MS. FEINSTEIN: If there was a policy or standard that could lead to the legitimization of trading the health and well-being of your grandchild or your grandmother for the good of the somewhere -- somebody somewhere else, or other people, would you pursue that path?

We can't settle for -- we can settle for nothing less than solutions that can not be used as an opportunity to trade away any community, or Mother Nature's health, or well-being. We need to create solutions that unite indigenous leadership not undermine their combined wisdom and ability to lead the way.

We choose solutions, such as cap and trade and

setting standards that allow for monetization of Mother Nature, because even with thorough work and deep commitment, we don't consider all our options. We do things like plant trees to license cutting old growth with devastating consequences.

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We frack. We -- with devastating consequences to front-line communities. We support policies others have researched testified are not working. We do these things not because we have bad intentions, but because we don't consider all our options. We assume we can't buck the power of the fossil fuel industry. To successfully address climate change, rather than accommodate or even mitigation, we can and must buck the interests of fossil fuel.

We need to cut pollution at its source. We need to keep it all in the ground. And we can't --

CHAIR NICHOLS: Than you.

MS. FEINSTEIN: -- wait another day to understand that stopping all extraction is the desperate necessity to protect future generations --

CHAIR NICHOLS: That buzzer and the light went off for a reason, ma'am. I'm sorry. We can take your written testimony if you have it, but you've used up your time.

MS. FEINSTEIN: I just want to say one other

thing, which is I really encourage you to encourage your staff to create -- cultivate and create partnerships with the brilliance of people in this room. That is something that will help craft the solutions we need going forward.

CHAIR NICHOLS: I hear you. I hear you.

(Ohs.)

(Applause.)

CHAIR NICHOLS: Two minutes goes by really quick. I'm sorry.

MS. ZIZI: Good afternoon, Board and -- Board and Madam Chair. My name is Isabella Zizi. I come from the Northern Cheyenne, Arikara, and Muscogee Creek Tribes Afternoon Board and mad a chair. I'm a member of Idle No More SF Bay. I'm also a climate campaigner with Stand.earth.

I want to first acknowledge the original people of this land and thanking -- thanking them for letting me be here and stand here. I'm representing not only the things that I had named, but I'm also representing my family. I'm representing the City of Richmond where I grew up just about six blocks away from Chevron when it exploded in 2012.

I represent the younger generations who aren't able to be here because they're at home right now away from school because of the fires, and the smoke. I'm also

representing the voices that go unheard, and also the voices that are being silenced, or that have been silenced, or that continuously be silenced.

And I just wanted to list the names of the autoimmune diseases that are caused by the fossil fuel industries, because I'm sure that more than one of us here have known people that have -- that either have these autoimmune diseases or that they have lost.

There's asthma, pneumonia, bronchitis, upper respiratory and eye irritation, heart attacks, heart diseases, cancers, mainly lung cancer, organ damage, neurological deficits, immune system problems usually that occurs in children.

And just naming those is very unfortunate, because some of my family members have passed on because of that, and some of -- my little sister has bronchitis herself. And knowing that we live not too far away from Chevron itself and knowing that there is things like this like the tropical forest offsets that's happening, it's not going to do any justice for us, nobody.

So listen and deny this. Deny the tropical forest offset standard, because it's not -- it's not going to help us live a sustainable life here on Mother Earth.

And I say that as someone who's going to be dealing with the situations, if you approve of this. And I want you to

really think about that.

(Ohs.)

3 (Applause.)

MS. ROSE TARUC: Good afternoon, CARB Board and Chair Nichols. My name is Mari Rose Taruc. I'm representing the California Environmental Justice Alliance, strongly opposed to the Tropical Forest Standard.

Yesterday, I woke up with a bloody nose. I was running around trying to help gather all these beautiful people and relatives to make sure that you hear from folks on the ground in California, internationally, because I know that your staff is mostly talking to the folks who are proponents of these tropical offsets.

And so we needed to make sure that there was a turnout for those folks who have seen on the ground that there are problems with these types of offset projects internationally and otherwise.

My son also said, "Mom, go there. Try to make sure that they clean the air", because he has asthma and he wants me to fight for him. And so I'm here fighting for my son, as many environmental justice moms, and dads, and grandmothers do. And the reason why we would go into danger and go into a place in Sacramento that has worse air quality than we have in Oakland or the Bay Area, it's

because we care about our families and our kids, and we want to protect them. And that is the motivation for us being here today is we want to protect our families. We want to make sure that they're healthier, and that their future is healthier. And that these tropical forest standards, these international offsets still pollute.

Offsets still pollute.

And so you will have the biggest users of offsets in California, the Chevrons, the PG&Es still pollute while they go out and create these projects internationally.

And I think for the Board to really figure out California, how we're making sure we protect our environmental justice communities, do it right here. Stop fossil fuels before you export this terrible offset program.

Thank you.

(Ohs.)

(Applause.)

MS. WOLF: Hi. I'm Shaye Wolf, a scientist with the Center for Biological Diversity in Oakland. And we are deeply troubled that CARB continues to ignore the extensive evidence documenting the harms of tropical forest offset programs in practice, even though this evidence has been brought to you repeatedly by front-line communities in California and abroad, environmental justice groups, indigenous communities, and more than 110

researchers that specialize in REDD.

And CARB must confront the evidence that tropical forest offset programs are a false solution that allow polluters to continue polluting and jeopardizing our communities, have a disturbing track record of human rights violations of indigenous peoples, and district from the necessary work of keeping fossil fuels in the ground in our state.

Frankly, I think that it's shameful that
California is one of our nation's top oil producing
states, extracting some of the world's most climate
polluting oil. And that drilling and refining occurs
disproportionately in communities of color and low-income
communities, and we have no plan in place to phase down
our dirty oil extraction.

(Applause.)

MS. WOLF: The evidence on the ground repeatedly shows that REDD type programs do -- are easily gamed, and abused, and do not effectively reduce deforestation because of the failures to control leakage or ensure permanence or additionality. And CARB has not shown how these problems that are documented at the project level would be avoided at the jurisdictional level.

Instead of promoting these dangerous and divisive standards, California should be working to directly reduce

the state's procurement of the commodities that drive deforestation, such as crude oil from the Amazon. And California should focus on the necessary work of phasing out our state's own dirty oil production and use, stop deforestation in our state, and rapidly transition -- have a just transition to 100 percent clean energy. So justice and the evidence -- on-the-gound evidence that this -- these types of offsets programs don't work, and violate human rights demands that you reject the Tropical Forest Standard.

Thank you.

(Ohs.)

(Applause.)

MR. NOWICKI: Good afternoon. I'm Brian Nowicki with the Center for Biological Diversity. Thank you for hearing us this afternoon. I'm going to try not to be redundant with all of the folks who have spoken before and try to offer some of my overarching comments as we come to the end of this item.

I appreciate very much the hard work that ARB and staff have put into this over many years, and have no doubt about the intentions of the staff of the Board and of the document in front of us today.

We're hearing today though from folks who worry about the implications of a future program, and for -- and

worry about foregone reductions from California communities, if those reductions were exported via offsets. And I very much appreciate those comments and associate myself with those concerns.

But I also appreciate that what is before the Board today that you can draw this distinction that we are -- we are not engaging a program, that we are not launching an offset scheme in this. At the same time, we heard that from Richard earlier as he presented this that we are talking about an actionable model. And the other thing we heard from folks today was that even with that actionable model without California engaging in a program that we have a real potential for real negative impacts, and significant negative impacts to communities, to indigenous peoples, to societies, economies, and -- in the jurisdictions that we're talking about here.

For that reason, I'm looking at the environmental analysis, and I'm seeing that there is a lot of discussion of how we expect things to go, in the best case scenarios, and very little discussion about those worst case scenarios and downsides of where they are.

With that in mind, I'm right now not seeing how the Board could move to move forward with this today, until we dig down into those negative sides that were not fully addressed within the environmental analysis. Thank

you.

2 (Applause.)

CHAIR NICHOLS: Thank you.

MS. CINA-SKLAR: Good afternoon. My name is Zoe Cina-Sklar, and I am representing Amazon Watch, an organization that has worked to protect the rain forests and advance indigenous rights in the Amazon for over 20 years. And I am here to urge you to reject the proposed Tropical Forest Standard.

In our years of working in the Amazon, time and time again we have seen tropical forest offset programs fail to curb deforestation, in large part because they're not addressing the underlying drivers of this deforestation.

To give one example that connects to California. California is the world's largest importer of oil from the western Amazon, about 50 percent of the oil from the region. If we are setting up this program, we are laying the groundwork for a situation in which the same refineries that are processing this Amazon crude could be buying offset credits for the Amazonian regions devastated by oil drilling. And it's equally troubling that these programs are also -- this burning of these fossil fuels is also devastating communities here in California, as toxins are spewed into the air.

These programs, as many have spoken to, have not respected the rights of indigenous people to free, prior, informed consent. And these challenges are going to be multiplied at these -- at the level of an international jurisdiction.

To give an example, as Marlon Santi noted earlier, the Governor of Pestaza is moving forward with a protected area without having consulted the indigenous peoples who have title territory, seven nationalities.

And they're actually currently filing a complaint as part of the indigenous federation opposing this action, opposing the stand.

Meanwhile, the Governor, Governor Kubes, has sent a letter in support of the Tropical Forest Standard saying that he is excited to work with indigenous communities in this province, while they are filing a petition against him in law.

We need real action that addresses emissions at source, that respects communities, and that deals with this climate crisis we're in. This is not that action.

And I urge you, if you still have doubts, to at least consider postponing the vote on this, so you can have further discussion.

Thank you.

CHAIR NICHOLS: Thank you.

1 (Ohs.)

2 (Applause.)

MR. MILLER: Good morning, family. My name is Colin Miller. And I'm here representing my family, my ancestors and the over three dozen organizational members of the Oakland Climate Action Coalition. In Huchiun, occupy Chochenyo/Ohlone territory. I honor and I see the me inside of you.

Our coalition is a lead co-applicant with the City of Oakland on both the planning and implementation grants to the Strategic Growth Council's transformative Climate Communities Program in deep East Oakland.

Together, we are advancing collective self-determination of east Oakland residents social, racial, economic, environmental justice, and community-driven, climate-resilience planning and implementation.

I want to start by thanking the Miwok and the Maidu people for allowing me to be here, and to acknowledge that we are here on Miwok and Maidu territory on occupied and stolen land.

(Ohs.)

MR. MILLER: How did we get here? We are not here because of greenhouse gas emission. We've gotten here because of the violent and ongoing legacy of genocide, slavery, settler colonialism, extractive

capitalism, white supremacy, patriarchy, and militarism.

Climate change is merely the symptom of these violent systems and extractive and disconnected ways of thinking and being. We face a crisis of disconnection from ourselves, from each other, and from our Mother Earth, a crisis that spells our own extinction if we do not change our ways.

On October 30th, the Oakland Climate Action
Coalition was supported by 50 organizations in calling
upon the Oakland City Council to adopt a climate emergency
declaration, and just transition resolution. Oakland
joined Berkeley and Richmond in unanimously passing this
resolution. These resolutions acknowledge that climate
change intensifies existing injustices, and that
front-line communities, people of color, native people,
people with disabilities, low-income people are impacted
first and worst by climate change, and that our front-line
communities are at the forefront of change with the real
solutions.

As people of color and as native people, we have always been resilient. Your Board should pass the same climate emergency declaration and just transition resolution, and not pass Tropical Forest Standards. We must not only decarbonize California's economy, we must de-colonize California's economy.

1 Thank you.

2 (Ohs.)

(Applause.)

MS. CHAN: Good afternoon. My name is Michelle Chan and I'm here representing the 5,700 Friends of the Earth members in California, who submitted comments to you urging you to reject the TFS. And I like to address a couple of the things that we've heard today during this hearing.

Today, we've heard people ask if not California, then who? And I think the answer has to be no one. Ten years of evidence has shown us that this is the kind of plan that looks great on paper, but fails in the real world. It's fatally flawed and you know all of the different flaws from leakage, permanence, human rights problems, et cetera. So the answer has to be not California, and not anyone.

We've heard people say we need to put out this gold standard in the world, so that even if we don't use it, then other people can. My answer would be, no, we need to not put this out in the world, because even the best intentioned REDD projects go wrong.

Emma Jane Lord in the book Global Forest

Governance and Climate Change actually tells of a story

associated with Jane Goodall's institutes, one of her REDD

projects in Tanzania, the Masito Ugalla Ecosystem project. And she tells of an incident in 2012 where villagers were forced at gun point to burn down their own homes. Burn down their own homes so that they could get evicted and make room for a REDD project.

Now, if the lovely Jane Goodall cannot even uphold this gold standard with the best of intentions, what kind of chance do we have for the rest of the world?

We've also heard said that there recent IPCC report says that climate change is too urgent for us to not protect forests, and that's true. But really climate change is so urgent that we cannot be forced to choose between stopping emissions and saving forests. And this is what the TFS sets up. It sets up that choice. We need to do both.

Finally, I understand that after 10 years of hard work, so many good intentions, so much money spent on trying to develop a concept that won't work. What we're being asked now is to dress this up and pass it on to people that will maybe make use of it.

But the others that take it up like the airlines industry, they don't really care if it doesn't work. They just want some greenwashing. Don't let them use California's good name to greenwash.

Thank you.

(Ohs.)

(Applause.)

DR. MOAS: Hi, Board. My name is Dr. Amy Moas.

I'm here with Greenpeace. And you guys have great stamina
to last through all of the comments that have gotten us
here. So thank you for your continued patience and
attention.

I know that in theory all of your staff has put together this -- what sounds like a really great program with all the safeguards in place, and that your intent to protect forests is really true. But the tropical forest standard does not even come close to beginning to address the real drivers of deforestation. And, in fact, it's attempting to do it in the absolute worst way possible by trying to force changes to human behavior.

That can't be perpetuated for generations in order to ensure the permanence of these kind of emission reductions. So what that means is not only is your real goal of protecting forests not going to happen, but it also is going to hurt people. It can hurt the indigenous and local communities, that will be facing the forced changes to their behavior. And you're going down the stepping stone of actually hurting local communities in California that will be forced to pay for the offsets for these tropical forest projects.

There is not one emissions trading system today that allows these kind of jurisdictional forest projects, and it's for a reason, right? Permanence, additionality, leakage, all of these are very real problems. And I know that your staff has put a lot of effort into trying to address them, but we have a lot of real experience in these projects to date, right?

There's been tons of them that have been attempted. And not one of them has actually been able to secure real and lasting emission reductions. So while, you know, people will get up here and say that they have methodological rigor and that, you know, we can really do this, I urge you to really look at who's saying that and what they have gain by saying that.

I urge you to really listen to the people that have nothing to gain and only everything to lose. The unintended consequences of this kind of Tropical Forest Standard are also huge. Again, I believe that your intentions are good, but please look at what we have to lose.

Thank you.

(Applause.)

CHAIR NICHOLS: Thank you.

(Thereupon an overhead presentation was

Presented as follows.)

MR. HUGHES: All right. Again, my name is Gary Hughes. Chair, members of the Board, I have a couple of slides that I'd like the go through very quickly. I want to start in saying that it's critical that directors do the necessary due diligence to inform any action. And one of important element of due diligence in this instance is understanding the climate science that clearly describes the physical impossibility of forests compensating for ongoing fossil fuel emissions.

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MR. HUGHES: Protecting forests is clearly an imperative. Many of us have been working to protect forests our entire lives, including fighting the very State of California as agencies facilitated the last remaining old growth in the state.

We cannot and will not allow the last forests of the world to be lost. A fundamental to climate science that the ARB has failed to recognize is it that emissions are cumulative. We have a limited carbon budget left to burn. Time is running out. Okay. We must protect forests, and keep fossil fuels in the ground. There is no time left to rely on offsets.

--000--

MR. HUGHES: The toxic reality of how the California petrochemical industry has driven the

destruction the rain forests in the Western Amazon has been largely ignored by ARB staff and the Board. Even as many efforts have been made to bring the evidence of these impacts to your attention.

Addressing the drives Of tropical deforestation cannot be delayed. Yet, the danger of this standard is that it delays and distracts from doing just that.

Lastly, the international implications of this matter cannot be ignored. It's clearly stated by ARB that there's intent for this standard to be used by the global aviation industry. Aviation transport is an activity of the global elite.

More than half of the planet's population, that half whose climate impacts are absolutely minimal will never see the inside of an airport, much less step on board an airplane. Yet, these are the very people that live in the tropical forest regions in question, and who will be facing the adverse impacts of this policy.

So the negative impacts of this are not something that you will be feeling, and that is what creates a moral dilemma for you. You need to reject this standard on the simple grounds that it is not you or your families that will be adversely affected by this.

Thank you very much.

(Ohs.)

(Applause.)

CHAIR NICHOLS: Thank you.

DR. KEOHANE: Good afternoon, Chair Nichols and members of the Board. I'm Dr. Nathaniel Keohane, a senior vice president at Environmental Defense Fund, a non-profit environmental organization with two million members and offices in California and around the world. And EDF has worked to protect tropical forests in the Amazon for over 30 years, including with indigenous peoples in traditional forest communities.

I'm here in strong support of the Tropical Forest Standard. One of the most important steps California can take to meet its climate goals leveraging its status as a global leader on climate action to set a high bar for the rest of the world to follow.

Like many who've spoken, I'm a parent. I have two daughters and they're a big part of the reason I've dedicated my career to fighting climate change. Some argue that California should make progress at home rather than exerting leadership abroad.

CHAIR NICHOLS: Please sit down or stand back, sir.

MR. KEOHANE: That's a false choice. The climate crisis demands that we take every action available.

25 | California can slash its climate pollution, lead the world

on clean energy, and protect forest landscapes both at home and in the tropics.

What's more, California can't solve this problem alone. If you need evidence for that, just look out the window. The smoke from the wildfires may come from 80 miles away, but it is a visible consequence of the carbon accumulating in our atmosphere from global sources.

You've heard criticism today about existing voluntary REDD projects. But those criticisms simply don't apply to the standard before you today, which would incorporate lessons from years of experience into a best-in-class approach that requires real, additional, permanent, and verifiable emissions reductions at a jurisdictional level with strong safeguards to benefit and empower indigenous peoples in forest communities.

As a first mover with a well-earned reputation for rigor, California can have outsized influence in pushing other countries and sectors to have -- to adopt strong standards in their own programs, including the International Civil Aviation Organization.

EDF is proud to have been involved for a decade in this work. We look forward to working with Air Resources Board, with Assemblyman Garcia, and other members of the Legislature, and with other stakeholders in this room as you move it forward.

1 Thank you.

CHAIR NICHOLS: Thank you.

(Applause.)

(Audience noise.)

DR. WARREN: Good afternoon. I'm Dr. Matthew Warren, a tropical forest ecologist and research associate at Earth Innovation Institute.

I've been witnessing the cutting and burning of tropical forests for about 20 years now. And the air quality that we're experiencing today is experienced by hundreds of millions of people across South East Asia and South America every single year, and that is not an exaggeration.

I'm here today on behalf of the environment -- of the Earth Innovation Institute to express strong support for the California Air Resources Board endorsing the California Tropical Forest Standard. Solving climate change requires a transition in land use from deforestation and forest degradation to protecting and restoring forests in the tropics. California is already a renowned leader in policy for achieving the monumental transition to renewable energy and a low carbon economy.

Endorsing the Tropical Forest Standard would go far towards demonstrating California's climate policy leadership for achieving the land-use transition as well.

Although some countries and states have shown impressive success in reducing deforestation, these efforts have brought little recognition or reward. Endorsing the standard would reduce tropical deforestation, supporting jurisdictions seeking to protect and restore forests by providing economic benefits while safeguarding the rights of indigenous peoples and traditional communities.

2.4

Tropical forest regions need alternatives to deforestation-driven economic development. The standard is robust, including rigorous carbon accounting, risk mitigation, monitoring, verification, and social and environmental safeguards building on a decade of science and policy analysis. The Governors' Climate Forest Task Force stands really to help be a platform for the standard.

California, along with other members of the GCF, are forging a new model for recognizing and support the rights of indigenous peoples and their role as forest stewards via the recent endorsement of the guiding principles of collaboration and partnerships between subnational governments, indigenous peoples and local communities.

By integrating these principles into the standard, California also sets an important precedent for

how the international community nations and states engage indigenous peoples and local communities.

The time is act now, and I encourage you to endorse the Tropical Forest Standard.

Thank you very much.

CHAIR NICHOLS: Thank you.

(Applause.)

THE INTERPRETER: The interpreter will conduct a direct translation of the Spanish text into English.

MR. LOPEZ(through interpreter): My name is
Robinson Lopez. I am for the Inca people of Colombia and
the coordinator for Climate Change and Biodiversity and
the Coordination of Indigenous Organizations of the Amazon
Basin, COICA.

At this international organization convey organizations from nine countries of the Amazon Basin coverage, OPIAC, Colombia; CONFENIAE, Ecuador; COIAB, Brazil; AIDESEP, Peru; ORPIA, Venezuela; CIDOB, Bolivia; OAG, French Guiana; and OIS, Suriname.

With 33 of carbon is found in the nine countries of the Amazon basin with population of 3.5 million people in seven million hectares of tropical forests are today in imminent risk due to deforestation. Mega oil and mining projects, expansion of the agricultural frontier, and the armed conflict. From COICA, we work in the promotion and

pervasion[SIC] of the human rights, and territorial rights of the indigenous peoples.

We defend ways of live and spirituality. We conserve the forests for the well-being and plainful[SIC] of our people and the planet. As COICA, we're part of the global committee group for indigenous peoples and local communities where we have been coordinating actions for the respect of our rights.

From COICA, Maloca of the Amazonian peoples we support the standard of tropical forests of California, we urge the Council of Atmospheric Resources of California to consider important elements from the vision of the indigenous peoples that we have participated in this process of collective construction in the decision making of this process.

We believe that the DBTC standard is inclusive and respects the rights of indigenous peoples, their autonomy and free self-determination. It recognizes and values the spiritual and historical life that we have as indigenous peoples with a territory that cost -- gone on spiritual relationship.

Thus, we have safety strategies such as free, prior, inform consent. We -- they acknowledge that the contribution that the indigenous peoples of the Amazon have made in mitigating climate changes comes from the

traditional knowledge systems.

And California's tropical forest standard, it is recognized indigenous governments as strategic allies to work hand-in-hand for the conservation of human rights. The DBTC it's a very important instrument for the construction of public policies in different regions and governments. It is necessary to promote new policies friendly with environment about what is substantial life standards of the traditional knowledge of the indigenous peoples contribute to the sustainability of the planet.

Only United we can fight climate change. That is why we're asking this honorable council to approve this important DBTC standard. Only together can we combat climate change.

CHAIR NICHOLS: Thank you.

MS. RODRIGUEZ GOMEZ: I don't know who's Brian, but I think that's my -- do it in English. Thank you.

Good morning -- good afternoon, Chair Nichols, members of the Board. My name is Sayda Rodriguez. I'm an natural resources manager with 15 years of experience, and currently am a secretary of urban development and environment of the State of Yucatán government in Mexico.

Yucatán is part of a Miss American magic jungle, second forest massive of America, and reservoir of mega biodiversity and for the mitigation of climate change

globally.

The forest cover of our state today represent 68 percent of our territory. Mainly low deciduous forests, but about 25,000 hectares of forests are lost annually. Today, 51 percent of our forests are classified with some degree of degradation.

The government of this state, as well as many others of -- in Mexico are concerned, but also we are busy. We are here as members of GCF to ask to support of the State of California for this standard. Our government today have a challenge, a challenge to work together on climate change, to defend of indigenous rights and also of local communities to self-determination.

At the same time, we must strengthen the process of conservation of resources and achieve access for community to use tropical forests and improve their quality of life. We are convinced that in this commitment we can achieve through having criteria and guidelines that allow us to regulate the conservation and use of our resources.

At the same time, the right of local and indigenous communities is granted. This standard is the way in which we must empower and move through sustainable development to the American continent.

CHAIR NICHOLS: Thank you.

MS. RODRIGUEZ GOMEZ: As the government of Yucatán and as part of the State of Mexico, we believe that is our commitment to strength and be together in this pathway.

Thank you.

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CHAIR NICHOLS: Thank you for your comments.

MR. LOPES: Good afternoon. I was written here good morning, but it's no more good morning. So I want to recognize your resilience and your determination to be here all this time listening to us, okay?

So good afternoon, Madam Chair, members of the California Air Resources Board, community leaders, respected institutions, ladies and gentlemen. My name is Ludovino Lopes. I'm an environmental lawyer. I used to say no one is perfect working in climate change, natural resources, and environmental regulation and legal frameworks in the last two decades. I don't want to say 20 years it's too much in more than 20 countries around the world in the last years.

I'm proud to say that I've participated as a member of the ROW[phonetic] working group from 2010, 2013, and testify the effort that has been done to produce, I call it, unqualified documentation and recommendations to these boards.

I'm glad to be here today and seeing that the

leading actions and the years of permanent dedicated efforts of California team government are fortifying in transforming the world the real world.

I want to ask your attention and address the importance of the natural Tropical Forest Standards for the climate change legal and regulatory world scenario. I'm a lawyer, so that's the reason why I'm saying that.

We could say that this discussion is a technical discussion to approve a great technical document, for sure, the state of the art of regulatory and science knowledge California tropical natural forest standard.

I'm not -- no shouldn't -- don't have no doubt about that.

That's true it's a high quality document. But if we stay only on that discussion, we will be excluding probably the most significant importance of the standard as part of your contribution to climate change. What you respectable members of the Board are deciding is also about the central and strategical leadership of California climate change actions, about the world efforts and how to address globally climate changes. About the future of the least reminiscent areas of tropical natural forests in the world, and, of course, about the consequences for accident -- for citizens around the world.

The tropical natural forest standards as it was designed will establish a new worldwide approach to fight

climate change. It will introduce a critical missing elements on the regulatory and legal framework around the world on the natural tropical forests traditional approach.

We'll be the guiding tool that -- to that -- will allow jurisdictions, even they are separated by millions and millions of miles, talking different language, practicing different customs, and using different legal frameworks to cooperate and address their common objectives towards the construction of a world forest based low carbon economy.

CHAIR NICHOLS: Thank you. I'll have to ask you to stop.

MR. LOPES: One last --

CHAIR NICHOLS: Sentence. One sentence.

MR. LOPES: Allow me.

CHAIR NICHOLS: Okay.

MR. LOPES: We are proud to be in the homeland of Silicon Valley. And I've watched that in this land things are not addressed by pressing the delete button. Your history has been made of hard courageous decisions.

Please make history happen again, and when -- and you will use later today the power of decision, use with your best wisdom and press the key that really makes things happen.

Press the enter key, not delete key.

CHAIR NICHOLS: Thank you.

MR. SALVADOR CAMACHO: Good afternoon. Dear members of the California Air Resources Board, media, and general public. My name is Juan Salvador Camacho. I am a local congressman of the State of Chiapas Mexico, President of the Commission of Ecology and Climate Change. And I want to say that it is a big interest for us that the California Tropical Forest Standard is approved.

The State of Chiapas has natural reserves that offer environmental services, such as water, clean air, and value diversity, the Lacandon rainforest, the Sierra Madre of Chiapas, they El Ocotal Protected Natural Area to name a few.

In Chiapas, we have the second largest rain forest in the world, only after the Amazon. The standard defines criteria to safeguard the Mayan's people culture, and our natural resources bringing sure benefits to California, to our State, and to the rest of the world.

The biodiversity of the tropical forest in Chiapas and the Mayan rainforest includes the quetzal, the macaw, the jaguar, symbols of our Mayan ancestors, home of ancestral leading cultures that urgently requires action.

There are voices that are against this standard, critical voices, very respectable. I call you to raise awareness to achieve the care of our planet with action

and agreement.

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As President of the Commission of Ecology and Climate Change of the Congress of Chiapas, I want to highlight that this standard would mark a course on the president for public policies that we can apply in our state and begin to legislate on the matter.

Environmental services are very important for the entire planet, including California. That is important of this standard to be endorsed, because no one has ever recognized this work. No benefits have been found before in the communities, there the greatest biodiversity is found. That is why I urge you to approve this standard of tropical forest management.

Thank you all.

CHAIR NICHOLS: Thank you.

(Audience talking.)

17 | CHAIR NICHOLS: Michael Carr, are you here?

Candido Mezua Salazar.

19 MS. McCAIN: Number 88 on the list Christina

20 McCain is going to cede her time to --

21 CHAIR NICHOLS: Yes, who are you?

22 MS. McCAIN: Christina McCain.

23 CHAIR NICHOLS: Are you here -- oh, at the end

24 88, okay. Thank you.

MR. MEZUA SALAZAR(through interpreter): Good

afternoon, Chair Nichols, members of the board, and indigenous communities of the world watching and present. Good afternoon, Chair Nichols. On behalf of Saranomet[phonetic], President of the Congress of Nacion Embera.

My name is Candido Mezua. I'm an ambassador for my nation and my community that unites forward territories and I represent 30,000 -- or 30 million people. I'm the secretary of international relations of mesoamericana organization of forests that unites Mexico, Guatemala, Honduras, Nicaragua, Costa Rica and Panama.

We are not an NGO. We are owners of our land. For a few years we've -- for lot a years we've been participating in consultation in California and worldwide in different mechanisms that our forest rights are being discussed. And we are present proposing that our rights are protected.

In this scenario, years back we were worried about destruction of forests and the need for California's policy to recognize the rights of indigenous people. Since then, we've contracted safeguards and we have accepted the indigenous principles that have been adopted -- or accepted.

We have participated in these discussion because we are about life. We care about the life of our kids and

our forests. The standard recognizes the principles of rights of indigenous people in local communities as a key part of the standard.

California is leading climate change policy not only of what is applied in California, but also that can be applied worldwide. Before this reality today, it is your decision to make a change to not fall for false statements and to make a change in this reality. This standard is of the highest level recognized by scientists, but which scientists are we talking about? The Indigenous communities and people that are not here today, but that believe that this standard does stand for their rights.

We ask for your support and endorsement to protect the forests of the world and not just in California, the forests where we are, and if they're not protected will be lost forever, for your kids and for our kids.

Thank you.

CHAIR NICHOLS: Thank you.

Okay.

MR. HAYDEN: Good afternoon. Thank you, Chairman Nichols and members of the Board. My name is Tim Hayden.

I'm the natural resources director for the Yurok Tribe.

I'm here today to voice support for -- on behalf of the Yurok Tribe, and encourage the Board to endorse the

California Tropical Forest Standards.

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The Yurok Tribe, we're from Northern California. We're the largest federally recognized tribe in California with over 6,200 members. We own and manage over 60,000 acres of forest timberlands along the Klamath River in Northern California. We are traditional people, fishing people with federally recognized fishing rights. We work very hard -- we work very hard to practice our traditional life ways and cultural ways, and definitely support the work of the Board to address some of the climate change challenges we're seeing here both in our state and around the world.

We believe that the work that the Board has done to develop a Tropical Forest Standard is -- has been a long process, but we do support it. We certainly think that -- well, we're encouraged that it incorporates the guiding principles adopted by the Governors' Climate Forest Task Force last month.

We believe that it does support the rights of indigenous peoples and their self-determination goals. So with that, in conclusion, we just want to say we recommend that the Board does endorse the California Tropical Forest Standards.

Thank you.

(Applause.)

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             CHAIR NICHOLS:
                             Thank you.
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             MR. JOSEPH: I know that this is unprecedented,
    maybe, but we come -- we're a neighboring tribe.
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             VICE CHAIR BERG: Sir. Sir, you've already
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   had --
             MR. JOSEPH: And the Yurok Tribe we feel is
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    coerced into signing that agreement.
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             VICE CHAIR BERG: You've already had your
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    opportunity to speak.
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             MR. JOSEPH: I'm just saying that the -- that
    this is a division --
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             VICE CHAIR BERG: No.
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             MR. JOSEPH: -- that this has caused amongst
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    indigenous communities of California, that this proposal
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    is dividing California tribes.
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             VICE CHAIR BERG: Okay. We're hear that.
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             MR. JOSEPH: And this is a perfect example of
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    that.
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             VICE CHAIR BERG: Okay.
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             MR. JOSEPH: We have Yurok Tribal members here --
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             CHAIR NICHOLS: And you know something, we're
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    actually smart enough to have figured that out.
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             MR. JOSEPH: -- that do not agree with the
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    leadership of the tribe and the stance that they've taken.
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CHAIR NICHOLS: We heard you before and we heard

him.

2.4

MR. JOSEPH: And this is the division that I wanted everybody to show.

CHAIR NICHOLS: We got it that you took two different positions. So we heard you.

(Audience noise.)

CHAIR NICHOLS: Thank you.

(Audience noise.)

MR. NICKERSON: Good afternoon, Chairman Nichols and members of the Board. My name is John Nickerson. I'm a Registered Professional Forester in California, and I lead the forest team at the Climate Action Reserve.

I came out of the forest out of a position in managing forests back in about 2003 to work with some in this room on the forest offset protocol. And by all standards, I think that was an innovative approach that California took, and I have to say that I think it was very successful. Certainly, it could be improved. We've learned a lot by doing.

One thing I will say that all of those projects, if you look at a map of where those projects are today, all of those projects will certainly be managed for a very long period of time at elevated carbon stocks.

And the reason I bring this up is because I think that the same innovation could be shown in going forward

in approving the Tropical Forest Standard. We, at the Climate Action Reserve, support the standard, and we applaud all the work that's gone into it.

Thank you very much.

CHAIR NICHOLS: All right. Joanne Fanucchi, Nico van Aelstyn, if you're here. And then Steve Schwartzman.

MS. FANUCCHI: Joanne cedes her time.

CHAIR NICHOLS: Excuse me?

MS. FANUCCHI: Joanne cedes her time.

CHAIR NICHOLS: Okay.

MR. JOSEPH: Madam Chair?

CHAIR NICHOLS: Yes.

MR. JOSEPH: Your favorite speaker today.

(Laughter.)

MR. JOSEPH: There's just some things that I didn't say earlier that I graciously like to thank the lady that gave me her time.

And one is if this community, and if this Board her, and if this organization cared so much about indigenous people and their rights, as they claim, their was zero interpretation for indigenous languages today. And every single person in this room knew we would have indigenous representation from around the nations. And so shame on you. You guys were caught red handed for trying to say that you care about indigenous peoples and their

rights. There was zero translation for them today.

I'd also like to state that this -- the vision that's going on because of these programs in Indian countries are real. You know, we -- these are people that we share ceremony with. These are people that we pray with. These are people that we've lived a long time for thousands of years together as nations to nation, tribe to tribe. And you're committing another form of genocide amongst our people to cause division, to destroy lands -- You can shake your head, Mary.

CHAIR NICHOLS: Well, I'll tell you why I'm shaking my head is because --

MR. JOSEPH: Are you going to add more time on to me?

CHAIR NICHOLS: You could have, apparently, as much time as you want --

MR. JOSEPH: Thank you.

CHAIR NICHOLS: -- because somebody is going to give you a right to speak.

CHAIR NICHOLS: I'm shaking my high head about your translation point, because under our rules anyone who asks for translation in advance, if they know they're coming, can have translations. We don't do this for show or to look good. We do it because people need to have translation.

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             MR. JOSEPH: But you don't do it with intent
    either, because if you had intent --
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             CHAIR NICHOLS: That's not true.
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             MR. JOSEPH: -- you would make sure that your
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    guests would have translation.
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             CHAIR NICHOLS: For every language only if they
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    say they're coming, if they tell us they're coming --
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             MR. JOSEPH: You know they were coming.
             CHAIR NICHOLS: -- and they need translation.
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             No, that's not true.
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             So go ahead. You -- go ahead.
             MR. JOSEPH: Mary, I know that some reason our
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   politics seem to differ and it seems to emotionally affect
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   you.
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             CHAIR NICHOLS: All right.
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             MR. JOSEPH: And you present your Board in making
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    these comments personal. But the facts are real.
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    We're -- we are the cause of climate change. And because
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    of negligence, be it from this Board or the Chair, is the
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    reason why --
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             CHAIR NICHOLS: We're all in this together.
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             MR. JOSEPH: -- we're in this predicament.
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             Thank you.
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             (Cheering.)
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             CHAIR NICHOLS: We're here because we -- we did
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not need to take this on. We weren't ordered to deal with this issue. We have given a lot of time and listened to this, because we thought we should.

We though we should.

MR. SCHWARTZMAN: So thank you, Chair Nichols, the Board. I've see I've got the worst slot here, so I'm going to be brief and try and spare your patience.

I'm Steve Schwartzman. I'm senior director for Tropical Forest Policy at the Environmental Defense Fund. EDF has worked in the Amazon for over 30 years, and I've worked there for considerably longer than that. I'd like to tell you first about kind of paradigmatic project that we did back starting in the early nineties that I think is really at the root of everything we've done. That's basis of everything that we've done in the Amazon.

It's a project with Panará people. Panará are people who are an isolated indigenous group who lost about two-thirds of their population at the end of the 1960s when the government ran a road through the center of their territory, and picked up a handful of survivors and relocated them, essentially forcibly, on what was, from their perspective, another planet.

Some years after that, I had the great privilege to live with them for a year and a half and learn their language. And a number of years after that, they called

on me and some of my Brazilian partners to come help with new ideas that they had. So we were, in short, able to enable them to return to their traditional territory, that's -- the still intacted -- intact forested part, an area about the size of the State of Delaware, and reoccupy it and get legal recognition for it.

About five years ago, their population reached and surpassed its pre-1968 level for the first time.

They're doing very well there.

Today, we're working in a much larger area with about 20 indigenous groups, and some -- dozens of traditional communities. It's an area -- continuous area of protected forest, mostly indigenous territory, about half the size of the state of California. And our partners, these indigenous and traditional communities and their organizations are on the front lines of a very tough fight to protect their territories from illegal gold mining, logging, land grabbing.

And really I'm very grateful to be able to support them in this fight, and they're -- they're doing pretty well. They're -- you know, there's -- they're holding on, but they need support.

The point is, in our view, the most important thing that California could do at this moment to support those struggles would be to approve the Tropical Forest

Standard, because it sends exactly the right message. It says California understands and cares about, recognizes the importance of stopping deforestation to dealing with climate change, and it recognizes the centrality of indigenous rights to dealing with deforestation.

That is a very powerful message. And it's not just indigenous peoples in the traditional communities that need to hear it. There's a lot of governments that really need to hear it as well. There's a bunch of governments that are still back in their thinking at the beginning of the 20th century, who think that environmental devastation, destroying the forest is the price of progress, and inevitably development and environment are irretrievably --

CHAIR NICHOLS: Right, like the new government of Brazil, for example. We can hear.

MR. SCHWARTZMAN: Opposed. You approved the -CHAIR NICHOLS: I extended your time. You can
let him finish just one or two more sentences, please.
And the last witness is going to be a person who came in
late, and who's an opponent, I believe. So let's just
give it a couple minutes, please.

MR. SCHWARTZMAN: Thank you.

Approving the Tropical Forest Standard would send the right message to the governments, the indigenous

peoples, and the private sector. Those people that are in the 20th century -- California is in the 21st century. California has demonstrated to the world that you can reduce your emissions and grow your economy at the same time. That's an important message.

Thank you.

CHAIR NICHOLS: Thank you.

All right. Last witness, Mr. Paul Ehara, I believe. Yes. Sorry, if didn't say your name right.

MR. EHARA: Thank you. I just wanted to quickly explain that actually I turned my card in at the begin -- before the meeting started, and I ceded my time to Isaac, but then was told that he had enough time. So would I like to just give up my time or should I -- would I like to speak and use my time. And I said I think I'd like to use my time.

CHAIR NICHOLS: Okay.

MR. EHARA: So I can understand the confusion and why the mistake.

CHAIR NICHOLS: Okay. That's all right.

MR. EHARA: So now that I've used a quarter of my time explaining that.

(Laughter.)

MR. EHARA: I do -- I do hope for those of you up there that the seat cushions you're sitting in are fairly

new and still resilient, so you're not uncomfortable through this whole thing.

I'm an ally with Idle No More SF Bay, a Richmond resident, grew up in Richmond. My wife Allison already spoke before me. And, yes, I am a grandfather. And what I would really like to do is to show you my Google photo album of my granddaughter, because I'm crazy in love with her.

But I do realize that I can talk about her in the context of everyone's concern about climate change and what's been happening. I also work at a bike shop in Richmond called Rich City Rides. And we had a partnership with the East Bay Regional Park District. We're supposed to have a day trip to Castle Rock Park in Walnut Creek, but I've been on the phone last two days to cancel -- to tell people that trip is canceled, because of concerns for air quality and people's health.

In my back -- in my parents' backyard, my father was a key bay gardener. He planted a tree when my brother Richard, who's 13 years younger than I am, was born. That tree has died. So these are just some personal reflections on how global warming is impacting my family.

And I represent, not thousands of people, but I think I can say I represent six people including myself. That would be my wife, my sons and their wives.

Oh, yeah, Aiya, the granddaughter, that would be seven.

So anyway thank you. And I just do want to say that I really do not support the Tropical Forest Standard, because I don't trust Chevron.

(Applause.)

MR. EHARA: And it seems like we're abetting Chevron's pollution by allowing them to continue to pollute by having them pay money to subsidize this project, which in and of itself, I think -- I can understand the reasons why people really want it to happen.

So thank you.

CHAIR NICHOLS: Thank you.

That concludes the public testimony part of today's meeting. And it will -- the record will be closed at this point.

However, I'm going to ask that we take a break.

Again, the court reporter has gone about four hours

without one, I think. And we could all use a stretch. So

we will come back and resume our discussions at 3:30

exactly, but I really mean 3:30. Okay.

Thanks.

ASSISTANT CHIEF COUNSEL HULTS: Madam Chair, We will need to respond to a couple of environmental comments

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   we received.
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             CHAIR NICHOLS: So when we get back you'll do
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    that?
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             ASSISTANT CHIEF COUNSEL HULTS:
                                             Yes, sur.
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             CHAIR NICHOLS: That's fine. Okay.
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             (Off record: 3:18 p.m.)
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             (Thereupon a recess was taken.)
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             (On record: 3:30 p.m.)
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             CHAIR NICHOLS: Thanks, everybody. And it's -- I
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   need to clarify one thing that may not have been clear
    when we broke. Are we on? Can I be heard?
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             Now I can. All right. Before we broke, I said
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    that the record was closed when I was referring to the
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   public testimony part of the record. So the little
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    discussion there at the end related to the fact that part
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    of the record is the staff response to comments.
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    environmental comments are made that need to be responded
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    to.
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             So what our attorney was trying to explain was
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    that he needs to enter a couple of additional comments
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    into the record -- responses to comments. And so after he
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    does that, then we will really close the record
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    completely.
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             So Mr. Hults, would you like to go ahead and do
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your thing.

ASSISTANT CHIEF COUNSEL HULTS: Thank you, Madam Chair. My name is David Hults, and I'm Assistant Chief Counsel here at the California Air Resources Board. We heard several comments today that involve previously raised environmental concerns. Those concerns have been addressed in the Final Environmental Analysis, and the responses to environmental comments prepared for this item. We would like to respond to a couple of points raised today.

One commenter stated that CARB did not perform a worst case environmental analysis, and did not address impacts to communities in the jurisdictions in which this program would or might take place.

Though this was a general comment that did not raise specific environmental concerns, CARB staff respects -- respectfully disagrees with this comment.

CARB's environmental analyses are designed to analyze, reasonably foreseeable environmental impacts using conservative assumptions to ensure CARB meets its environmental disclosure and related CEQA obligations.

CARB has done so here.

Furthermore, CARB responded to concerns about public commenters claimed impacts to indigenous populations in master response number one, and the responses to environmental comments and -- in the

responses to environmental comment document prepared for this item.

I would also like to address a comment we heard today that our environmental analysis purportedly did not adequately address the possibility of creating a legal recourse for tribes affected by jurisdictional actions due to the California Tropical Forest Standard.

I would like to point out that the Tropical Forest Standard provides the framework for such a mechanism. Chapter 10 of the standard identifies the social and environmental safeguards, and specifically requires implementing jurisdictions to have a publicly accessible grievance mechanism.

To the extent the commenter was requesting inclusion of a California based recourse mechanism, that is not legally feasible, because CARB lacks the authority to create new legal remedies for issues arriving in a foreign jurisdiction.

Staff requests that Board take these responses into consideration and that the Board consider approving them as part of its vote on today's resolution for inclusion of the record as a written response to these comments should the Board decide to approve the resolution.

Thank you.

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CHAIR NICHOLS: Okay. Thank you for that.

So at this point then, we can close the record, and those comments will be part of what's before us when we take up the resolution.

But I think before we do that, it's probably a good idea to have some general comments about where we find ourselves at this moment. As I said before in my colloquy at the end, the -- this is not something to do for fun. This is not something that the Board needed to undertake out of any mandate. And indeed, there have been many who have advised us that it was such a controversial topic that we should not deal with it. And over the course of the years that our staff has been working with many other people towards the standards that are now in front of us. They have I think been well aware of the fact that there are communities that really embrace the idea, and there were communities that were unequivocally opposed to it.

And I wouldn't say -- I would say they have not come any closer to each other from anything that I can tell. There may be a few people out there who have changed their minds. But by and large, there's two kind of basic things that divide people.

One is the issue of whether you believe in any kind of a Cap-and-Trade Program that allows for offsets at

all. And clearly, there are people who fundamentally disagree with that very notion. And, you know, they will continue to believe as they do.

But California's Cap-and-Trade Program has an extremely limited role for offsets. And as we've heard many times ours are difficult to get, they're difficult to use, they're difficult to deploy. And because of that, not very many projects have been undertaken, and they've all been in the United States, because we don't recognize any foreign offsets.

We are now venturing into an area, by even having this discussion, which is way beyond CARB's normal areas of operation. And I think we've had legal, and technical, and expert staff who've worked with us every step of the way. But clearly, there's the -- there's a danger of California's name being misused, abused. There were allegation made that, in fact, the very fact that California has been talking about this topic had been used to cause harm.

That's very troublesome. I don't think any of us feels okay about that comment. And I would certainly like to think about what we could do to prevent that from happening. On the other hand, we're also out there. We're going to the UN meetings, not just about forestry, but for many other things. We're engaging with people

from other states and other countries around the world.

We actually trade carbon allowances with a foreign jurisdiction in the form of Quebec. And we've -- you know so we have our toes more than just in the water on this issue of, you know, being out there in a larger environment.

And so we do sort of have to ask ourselves, which is the -- which is the more harmful or which is the least harmful thing to be doing in this topic area?

I have to confess that if there's one person who spoke to us whose views I at least tend to be most guided by, because she's been a hero of mine forever, it would be Jane Goodall. And her letter did capture my thinking at a particular point when I was really feeling concerned about whether we should be speaking on this area, because of her deep concern, and we all know it, that the tropical forests are, in fact, vanishing, whether they're vanishing because of foreign influences, or local greed, or criminals, or many other things, they are -- they are being destroyed.

And so that problem is going to exist whatever it is we do, and we -- we should be trying to find a way to do something.

So the idea of having the standard out there is that it would help guide investments, which nobody denies

are needed to help strengthen the role of whoever it is that owns forests and strengthen their jurisdiction, strengthen their ability to be stewards of their forests. And that's very much how this has worked with the Yurok. And it's been unequivocally, as far as I can see, a success from that perspective.

But on the other hand, that -- I feel like I've got about six hands here -- I really object to the idea that by doing anything that would encourage investments in forestry in tropical areas, we would be delaying, encouraging, postponing otherwise failing to deal with the need to reduce petroleum emissions. That would be -- that's just not okay, right? I mean, that's -- our business is to be dealing with the things that cause pollution here and everywhere else.

I don't think the two things are commensurate. I mean, I don't think the two of them are connected in any -- in any good way. The emissions from the refineries, from the production, from the driving, the use of petroleum products are going to have to go to zero. I mean they have to go to zero or we are completely going to fail in our mission.

At the same time, we also have to deal with the loss of the forests, or we're also not going to be able to survive as a planet. We have to do both.

Can we find a way to de-link these two things, in the sense that if we approve a standard, we can also prevent it from being used as a way to give aid and comfort to the specific activities that we -- that we want to see ended? I would -- I would like to think that we could. Within our own jurisdiction at least we could, because we could decide what kind of offsets we are willing to accept.

In other places, we don't have that same degree of control obviously over how people think about these issues. And I have to say that when our witness -- or the representative of Norway came, you know, Norway has been the biggest funder, I believe without a doubt, of activities that are attempting to support actions to save forests.

And Norway is a big oil and gas producing country, and they're producing a lot of oil and gas that other people are -- including us, are using. So it's not like they're -- that there's no connection. They're not just spending money only out of the goodness of their heart. Although, they've chosen a way to spend money that I think has put them out there on the front lines of doing something good that nobody else was doing.

So it is a very complicated topic area, and we've just heard bits and pieces of it, as we've moved forward

on this discussion today, despite having been here for a long time, and I think listened very carefully to everybody who came to talk to us, and frankly put up with some pretty insulting comments as well. But we get it that people feel strongly about this, and, you know, so we're going to have to take that.

But at this point, I guess I feel like it is a -it is a real balancing decision that we have to make as to
whether we go forward at this point. And I guess before
asking the other Board members if they want to weigh in on
any of what I just said or have other things to offer, I
would like to give the staff at least an opportunity to
respond to the situation and to the overall state of the
discussion here.

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Sure. Thanks, Chair Nichols and members of
the Board for a long afternoon. And thank you for the
audience for all your testimony.

I think we share, at the staff level, the same concerns that many of the folks in the room raised. I think one of the main concerns we heard expressed on trying to address tropical deforestation relates to how it -- how it relates to indigenous communities. That is something that's been documented. We've seen that evidence. Folks have brought that to us.

A lot of that has been in the project space. We've looked at that and tried to design a standard that would not have those same impacts, that would be looking to ensure that local communities indigenous communities are at the table and are actually drivers in the seat.

We heard some compelling testimony I think from Candido Mezua from Panama expressing -- as well as some other folks who were in the GCF indigenous coalition expressing interest in the fact that the standards -- the principles that those indigenous leaders brought to the GCF governments to say you need to include these in whatever you do. And that's what the standard includes.

The safeguards, protections, the increasing of the level of engagement of sunshine on that type of engagement on the verifiability of that engagement, and on having governments, including our GCF partners, including ourselves, having our feets[SIC] held to the fire for that accountability by our tribal and indigenous partners, that is what the standard is trying to do on that front.

So I guess from -- on that specific comment, and that specific kind of line of comments, we believe we've included a really rigorous, best-in-class, because it builds on the recommendations, and on the principles that were brought to us by indigenous leaders, that that is something that if this standard were endorsed and were

used, those indigenous communities, as we heard from some of them today, can use to push better engagement and increased action.

I think on that -- the higher level question on relation to the Cap-and-Trade Program or to offsets, I think -- Chair Nichols, I think you just addressed that. So I don't really have anything more to add there.

I think that the fundamental question I guess in my mind is, is there something we can do to help on the drastic emissions that are coming from tropical forests?

And based on the ten years of work we've done, based on our expertise in our own programs, is there some guidance we can offer that others may take up, because California does have this climate leadership mantle.

And I think from the staff perspective that is what the standard is attempting to do. We've heard from folks who, from my view, it's very exciting that folks like Norway, and the UN, and some of the indigenous leaders we heard from Panama and Guatemala, that this is something they can take home and incorporate into their own processes to push their own governmental actions with subnational and national governments.

And I think that's really the intent here. The drivers of deforestation are rampant. The trends are not good. We showed that map earlier from the World Resource

Institute. The economics behind those drivers are valuing cutting down those forests for other purposes. I think we agree with the commenters saying that we need to figure out ways to reduce all those different things that are coming out of the forests that are not sustainable.

From the staff perspective, the standard really helps us do that. A jurisdiction using the standard has to assess those drivers publicly. It has to have that done through a reporting that is third-party verified in consultation with indigenous communities for everyone to see.

And I think that testing this out, seeing whether folks -- what difference that is making, I think that's something we can continue to observe.

And I guess my final point would be that it sounds like there's actually a venue for that to happen. The GCF Task Force, this indigenous communities working group that helped develop the principles that we've been hearing about today is ready to be the testing site for that to really see whether that's being involved, whether that's pushing action at the government level in their own jurisdictions. And it sounds like that's a place where we can observe what's happening, and report back, I think.

And it sounds like that space may also be a place for some of the other folks who were in the room, if

they're interested, to engage as well. And I think for some of the researchers and others, that would be really valuable to be able to participate with that GCF indigenous persons working group to see, you know, what are improvements that could be made, what are successes.

So I don't know if that's helps, but...

CHAIR NICHOLS: Questions, comments? Did you, Mr. Serna, yes.

BOARD MEMBER SERNA: Thank you, Chair Nichols.

First, I'd like to start by thanking everyone, regardless of what side of the issue you're on this, for taking the time to be here. Some coming from across the globe to be here to address us, and certainly with a great deal of passion express your position.

Regardless of again the -- what side you're on, I think it always helps this Board to hear in great detail the reasons why you hold the positions that you do. And this is -- this afternoon is no different. So I appreciate everyone that took the time to be here.

I guess for me this is -- today's decision in front of us, the recommendation in front of us is really no different than what we do on a fairly standard basis. And that is when we get down to brass tacks, the body that we serve on here is asked to rule make, is asked to implement legislation, to be thoughtful about it, but

there is a theme to it.

At some point, there is a trust-me moment, right? There's a moment where after all of that thoughtful -that thoughtfulness and thinking carefully about how we're
going to implement policy, and hopefully affect the change
that we all want, there has to be a trust-me moment. And
this is no different. I guess to follow up on what Jason
just mentioned. And if you look at the details of the
staff recommendation, there are a number of paragraphs
that begin with the implementing jurisdiction shall do X,
Y, and Z.

What I'm -- what I want to hear more from staff about, and I think it really does speak to a number of the comments by folks that have their concerns about this, is how do we avoid, as the State of California, simply saying one and one, check the box, we -- you know, we've passed the threshold of this afternoon, and we're leaving it up to others to make sure that what we think this is going to do actually happens?

You mentioned third-party, you know, confirmation. Well, what does that mean? I think the people that again spoke today, mostly in opposition to this, or expressing a great deal of concern deserve to understand that as best we can explain it today. And I know that you can only put so much in a staff report or

staff recommendation. But I think that really deserves a little more conversation.

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: That's a great set of questions. I'll do my
best to respond.

A lot of the action that this standard would hopefully be incentivizing will be in other jurisdictions. And technical speak in the standard we call that the implementing jurisdiction, so the jurisdiction that will be doing the actions.

The premise of the standard in a lot of the provisions -- all the provisions in the standard really that that jurisdiction is doing. So in a way, that one is real, one is working with and communities, and two that is completely transparent and accountable. The accountability framework in the standard would be leveraging the third-party verification auditing process that we have for our own greenhouse gas verification program.

So the MRR data that feeds into our greenhouse gas inventory and to our Cap-and-Trade Program. It would be based on the international standards that auditors are doing on other types of programs as well, but really building into it a robust requirement that that auditing team works directly with indigenous communities, has a

human rights expertise, indigenous rights expertise, and an ability -- demonstrated work experience on those types of topics in tropical jurisdictions.

So the third-party auditing would be an independent assessment by an expert auditing group of the types of actions the jurisdiction is taking, the type of engagement, public process, consultation process it's had with its indigenous communities.

And then the larger accountability framework here is all this would need to be publicly proposed. We could see it, others could see it, and folks -- that would be very transparent in terms of what were the reports, what were the results of that audit, what were the results of the actual action on the ground?

BOARD MEMBER SERNA: So it would very inaccurate to believe that today represents the one and only bite at the apple, so too speak, in terms of advocates feeling like they -- you know, that this is such a threshold moment, that they would not have the ability to actually intervene, show up perhaps in even greater numbers next time, if they thought there was a real concern about how this is being implemented as designed?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: I think that's exactly right. And I think
that a lot of the expertise we heard on all sides of this

discussion today ideally would be feeding into those audits to see if this is actually the work that's going on in a specific implementing jurisdiction.

CHAIR NICHOLS: Well, let me, if I may, just piggy back on that and drill down a little more. I don't think that we're under any illusions that the Government of the Cross River State in Nigeria is any better than the witness here said it is. And he believes, and people he represents believe, that the standard is going to be used by that government in ways that are going to be hurtful to the interests that he represents.

He's got an opportunity to raise that issue in courts and politically, I suppose, in Nigeria. But how is this going to impact that situation that he finds himself in?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH CHIEF GRAY: Well, thanks. That's -- I think it -- I don't think any of us would sit here today, including likely our GCF jurisdiction members, and say that all those jurisdictions can meet this standard yet.

And I don't know that all those jurisdictions will want to try to meet the level of rigor that's in the standard. If a jurisdiction wanted to claim that it was meeting the type of rigor that was required here, it would have to go through this public process, this auditing

process.

And if another partner, a commodity company looking to work with that jurisdiction for more sustainable sourcing, another emission trading system, another type of financing mechanism, if they wanted to work with that jurisdiction, all that information would be very public. And if the claim from the jurisdiction is we met the standard, but the auditing report, the indigenous peoples engagement in that process did not show that, then that jurisdiction wouldn't be able to meet the standard.

CHAIR NICHOLS: So, in theory -- again, in theory, this could actually add greater transparency and more rights to the process?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: That's the idea. And I think we heard from
some of the folks that are -- that developed the
principles of engagement from the GCF Indigenous Peoples
Working Group, that that was the intention and the hope
behind those principles, is it leverages additional power
essentially for indigenous communities in working with
their governments.

BOARD MEMBER SERNA: And it wouldn't just be in the context of policy or resource allocation to carry it out. The way I read this is it also would be scientific. I mean, there's some -- some very particular requirements,

for instance, for remote sensing baselines.

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH CHIEF GRAY: That's right.

BOARD MEMBER SERNA: Okay.

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: So it would be on those -- both those fronts
in terms of looking at your carbon -- looking at your
forest stocks, looking at the reductions you've achieved,
as well as looking at the process, the engagement, and the
respect for rights.

BOARD MEMBER SERNA: Thank you.

CHAIR NICHOLS: Other questions or comments at this point?

Ms. Berg.

VICE CHAIR BERG: Thank you.

Just piggyback on these conversations. And then is it our organization, CARB, that will be reviewing these reports and approving?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: So I think that depends on which other types
of programs would use the juris -- sorry, use this
standard. If it's not something that's coming into ARB's
program, then I think we're -- the interest that we would
have is seeing if the standard is being used, and how it's
being applied in those other types of programs.

So if an implementing -- if a -- sorry. If an implementing jurisdiction, if another jurisdiction is using this to demonstrate that their deforestation rates are going down, they've done so in a way that's benefiting indigenous communities, and they're working with a jurisdiction like Norway that's going to be recognizing that action, or a commodity company that's looking to source material from there, I think we have an interest in seeing how that's working.

But if that other program, if Norway or the commodity company, they would be the ones assessing does that meet the level of their program?

We're hoping that those other programs will take our standard to say this is what we'll assess it against. So if Norway or -- or ICAO - I know that was mentioned - is adopting this model into their process, they'd have to be looking at how that works. And all of us would be able to say what -- you're meeting that or you're not meeting it.

VICE CHAIR BERG: But in the case of the example here, ICAO, the U.S. carriers that the airlines - I mean, you identified the airlines as an example - then the U.S. airlines that are going -- that might be interested in this, then who's going to monitor that within the United States?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: So that specific example I think would be the
treaty body itself. And as we mentioned in the
presentation, there's a risk of the level of rigor that
treaty bodies will adopt. And I think that's one area
where this model would be a rigorous model that they could
look to at least.

The airlines would not be the -- in that context, if that were to happen, they would not be the entities that assess whether the standard is being met. The treaty body I think would be.

VICE CHAIR BERG: So given that California's name is going to be associated this California standard, then what comfort do we have that the rigor that obviously we really believe in is, in fact, going to be carried through?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: I think that ability for us to report back on
the use of the standard, on what's being done to meet the
different requirements, I think that gives us an
opportunity -- multiple opportunities to say we think
it's -- it needs to be improved or it's not being used in
the way that it's drafted, or, you know, that's not living
up to the rigor that's required.

VICE CHAIR BERG: And then maybe if there's only

one other thing you could help me with. If we didn't pass this standard, if we decided to pass on this just out of discussion, what is the dis-benefit versus what is the benefit of what we're hoping the benefit will be?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: I think that the economic realities for
deforestation are pretty stark, and -- sorry, too close to
the microphone.

If we're seeking to provide some ability of folks to assess a different type alternative, the California name on this, the California stamp of approval really sends the signal that we -- that we, as California, take that very seriously, and that we're looking to help drive reductions in a way that's -- that has different incentives to keep forests standing the way it protects people.

If we -- I think if we didn't act on this, that status quo just maintains. There's not an additional model. There's not an additional level of rigor out there that folks would be able to use.

CHAIR NICHOLS: Yes, Mr. Gioia.

BOARD MEMBER GIOIA: Okay. Thanks.

First, I want to thank the staff and -- for their work. And I want to thank folks who've spoken on all sides of this issue. This is clearly an important policy

issue. And I think we need to -- we under -- we clearly understand that.

And so I want to address my comments more to sort of public expectation and trust in what we do, and our role in maintaining support for our ambitious climate change policies. So I want to start and acknowledge that, and I think everybody in this room does, that we need to stop deforestation, and to take action to protect and restore our tropical forests around the world, and that protecting forests globally does have climate benefits. And we also understand that developing and supporting policies to prevent deforestation is important. And as a state, we may have a role in that.

But saying all that, I also believe that -- and I'll explain why here, that we need to continue to sharpen our focus on pursuing our greenhouse gas reductions and our climate change goals in a way that directly benefits all Californians. And I worry a bit that if we -- that endorsing this policy today could lead to some distrust about our -- about those efforts.

I know we've developed -- and I think this state should be proud, we've developed policies to transition our energy use from fossil fuels to renewables, and to achieve emissions reductions in California. And I think this Board should be proud of that. It has led the world

in that. And I think our policies are driving innovation to achieve zero-emission technology. And that, of course, has health benefits for all Californians, and it also grows our economy in the clean energy sector.

And so I think we need to double down on that focus. The focus of achieving reductions that primarily benefit Californians, especially at a time when we're continuing to see great disparity in pollution impacts among communities around our state.

And, in fact, I remember when I went before the State Senate Rules Committee about five years ago to get confirmed to this Board, I heard from both Democrats and Republicans on the Committee about the importance of focusing on achieving our reductions here in California.

And AB 32 and all the legislation since then that lays out our climate goals clearly provide that we should achieve greenhouse gas reductions in a way that also provides co-benefits to Californians, right, co-benefits that include improved air quality, improved health, and economic benefits.

And I think we saw the public's and the Legislature's strong desire to get emission reduction benefits here in California through the passage of AB 617, right, the community blueprint process.

And so when the Legislature voted to extend cap

and trade through 2030, it also passed a companion bill, AB 617, to focus on developing plans to reduce emissions in the most impacted communities in California. And I think the passage of AB 617 was in response to the -- to public concern that in addition to cap and trade, that we need to achieve real and tangible air quality improvements that benefit the most impacted communities in our state.

And I think we also need to remember that it was the voters of California who protected AB 32 when it was challenged by the oil companies in Prop 23. And if we look back at that campaign, we can see that the voters rejected Prop 23, which would have overturned AB 32, because they demonstrated that they cared about fighting global climate change, but also in seeing emission reductions and co-benefits primarily in California.

And they trusted the State and they trusted this Air Board to do that. And so I want to ensure that every action we take continues to build and -- maintain and build on the public trust, because we also don't know when there will be another attempt to try to overturn, stop, or delay this state's efforts on climate change. And ultimately, we need the public support if we're going to keep doing that work.

So I think we need to be mindful about how we focus our greenhouse gas reduction strategies in a way

that builds this public support. And I think while there was a lot of work done in developing the standard before us today, and while I know it does not link today to the Cap-and-Trade Program, it's clearly intended as a foundation to eventually link to cap and trade. And, you know, one of the -- one of the whereas clauses in the resolution does say while the standard has been developed to enable international action by other jurisdictions, it could also provide a framework to potentially connect with the California Cap-and-Trade Program in the future, only after a public process and Board action. So we know that there would need to be public process and Board action, but we also know it's the first step in doing that.

So I'm concerned that many communities impacted by pollution will see this policy, and the possible use of offsets to protect forests in other countries, as noble as a goal that is, as a diversion from focusing our efforts on the pollution reduction benefits here in California.

So I just think we need to be mindful of these things as we consider this policy today, so that's why I'm not comfortable in acting on this policy today. And I think that this policy has international implications, and that maybe, you know, we should consult with the State legislature and get their formal input before some final action, as well as our EJAC, the Environmental Justice

Advisory Committee, which we would normally would seek official input from on policies that have implications for impacted communities.

So I think that's how I view, you know, maybe what's a prudent approach before accepting a policy that puts California's stamp of approval on something that is clearly still debated internationally. And how we continue to focus, because we've done great things here in California, and to keep the focus on that, and to continue the public trust in what we do, and to continue to make progress.

CHAIR NICHOLS: Thank you.

Mrs. Riordan.

BOARD MEMBER RIORDAN: Just a follow up in a little different way. There is one very important factor, Supervisor Gioia, that I think we need to remember, and that was on the -- I guess, the second slide. And the research is that tropical forests have a real relationship on California's snowpack. And all of us in this room enjoy a very good snowpack in California when it occurs. And when it doesn't occur, we are very stressed, not only our forests are stressed, but people like myself, we have watering issues. We can't water our landscape anymore, as we used to. So I do think there is a very clear link between the tropical forests and our efforts to save them,

and our own forests, and our own snowpack, and our Sierras. And we all enjoy, to some degree, some of that snowpack, regardless of where we live in California. It's just a critical thing. I just remind you of that.

CHAIR NICHOLS: Yes.

BOARD MEMBER TAKVORIAN: Thank you. I just want to add my thanks to everyone who's here today, and particularly those who have traveled so far from the communities that are so impacted by climate change, both here in California, throughout the country, and throughout the world, particularly the global south. And really, it's as a result of the overconsumption of resources by first-world countries. So I think that this conversation has a lot of impacts for us across the globe really.

And I am reminded of the time that I spent as an appointee of President Obama on the NAFTA Commission on Environmental Cooperating, which was an ironic place for me to end up, since my organization is an organization that's bi-national in San Diego Tijuana, and we spent a lot of time opposing NAFTA.

And so I sat on this panel. And I just want to point out that while I think that it's very well intentioned to talk about how we can verify, and how there can be enforcement of the provisions that are being put forward, that continues to be something that is only for

privileged people, no matter what country you're in.

(Applause.)

BOARD MEMBER TAKVORIAN: So what I watched was that the Canadian environmental groups had great access to that process for the petition process for enforcement of environmental regulations, and Mexico poorer communities had virtually none.

So it just kept going around like that, that the violations of environmental rules in Mexico went unfettered and those in Canada were able to be changed. So I think that we need to be cautious and look at some of the models that already exist, and whether or not those are successful. So I would say I don't have a lot of faith in that system that you're talking about, so I'm concerned about it.

And, of course, we're all concerned that climate change is a really urgent issue, but I don't think that endorsement of this standard is one. And I would like us to not conflate those two things.

(Applause.)

BOARD MEMBER TAKVORIAN: So that's one.

And I also agree that sending a strong signal is important, but I think approving this standard is exactly the wrong signal to send around the world. And I think it revolves around authority. And our Chair talked about

that a little bit, and I appreciated that. Because in California, to my knowledge, CARB has not -- does not have a mandate to adopt this policy or this proposal. We haven't been directed to do so by the Legislature. Staff hasn't actually been directed to do this by the Board. It's not actually even referenced in the scoping plan.

And the scoping plan was mentioned in the presentation. The 2017 scoping plan doesn't mention a Tropical Forest Standard. It mentions deforestation, of course but not -- it doesn't -- it doesn't go into anything about a standard like this.

So that was, you know, just less than a year ago actually that we adopted that. So I would think if we were working on this, it would have had a stronger role in the scoping plan. And it didn't, so I don't think we're depending on this kind of a standard in order for us to fulfill our scoping plan and our targets.

I think the broader thing is is that we don't have the authority with communities around the world to be the, what I would consider, a patriarchal mediator here. I mean, it's clear that there are issues in every country in the world, and every country that's represented here, and that things are not going well, as it relates to deforestation and protection of our forests, but that doesn't make California's role the one to step in.

We should do what we can to support international entities and international coalitions, like we did in this -- in the recent global forest task force when the principles for collaboration and partnership were adopted. But one of these principles is we advocate for subnational bottom-up leadership in national policies for reducing emissions from deforestation and degradation and low emissions rural development that affects indigenous peoples in local communities and environmental governments in GCF members states and provinces.

So how do indigenous communities fit into those member states and provinces? How do their voices get heard? That's my concern. And I don't think that we have a methodology for making sure that that happens.

And I'm pretty sure that's not CARB's role to try to figure that out. How are we going to mediate between folks that we've talked to -- that have talked to us today from the same jurisdictions that have such stark differences about how their communities should be -- should be protected or, in some cases, should be exploited?

That's -- these are serious issues that are -- that touch on hundreds and thousands of years of indigenous culture.

(Applause.)

BOARD MEMBER TAKVORIAN: And I just don't see how it's CARB's role to try to mediate that.

I want to just remind us that I think it was last month that we adopted our first Tribal Policy -Consultation Policy with CARB.

(It's about time.)

(Applause.)

BOARD MEMBER TAKVORIAN: Right.

So I wouldn't say that we have a ton of experience with this. And I don't know that we're the ones who are -- should be weighing in on how tribal communities or sovereign nations should be relating to first-world countries. So that's -- that's a concern.

And a big one for me is that alternatives have really not been evaluated here. And I don't mean alternatives in the narrow legalistic frame that I think is in the proposal. And I'm not questioning whether or not the legal standard was met.

But I do think that we haven't had workshops on what the alternatives could be for reducing consumption, for looking at both demand and supply side, and non-market mechanisms that could be utilized. Why aren't we looking at disincentives for California companies to not be using Amazon crude, and using those lands for beef, and timber, and paper.

So those are some things that I would suggest we need to do. In addition, I would really support

Supervisor Gioia's thoughts about what the impacts are on environmental justice communities here.

So I'd like to recommend that we not take action today, and ask that CARB actually go back and consult with the Legislature. And I would ask that our legislative members provide the liaison between CARB and the Legislature to provide the best route for communication, collaboration, and direction, and find out what the Legislature thinks about that, and to also look and examine those alternatives on both the supply side and demand side, and expand from beyond the market-based mechanisms, and consult with the indigenous communities, and -- in a big way, in order to come back perhaps, if warranted, with a proposed policy that incorporates more alternatives and other methods for achieving the goal of fighting and preventing deforestation. That's what I would recommend.

(Applause.)

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CHAIR NICHOLS: So -- thank you. When we first started working on this, or Jason first started working on it a number of years go, I raised exactly the same questions that you did in terms of other things that we should be doing, not necessarily in lieu of, but at least

side by side with anything that related to a standard having to do with our own import practices, you know, the problems with certification. I even had conversations with the people over at PERS, who do a lot of auditing of companies, and we're looking at standards for what California pension funds would be invested in, in terms of corporate behavior around international forestry.

And I have to say that all of that kind of went to the back-burner simply because we didn't have resources or, you know, staff assigned to work on all of that. And so it's not been an area of tremendous activity, and it really should be part of something bigger.

I do -- I hope this doesn't sound facetious, but consulting with the Legislature is not really something that is easily done. I mean, we have -- I'm not -- we have a legislator. I'm not saying we don't. What I'm saying is the Legislature, as a body, tends to act through the budget, through legislation, through oversight hearings or whatever. They don't consult, in the sense that you're referring to.

However, we do have on this Board the representative of the Assembly who chairs the Joint Committee on Climate Change, or co-chairs I guess. And so I would be interested at this point in asking for his opinion.

ASSEMBLY MEMBER GARCIA: Well, thank you.

2 In español?

3 (Laughter.)

ASSEMBLY MEMBER GARCIA: (Spoke in Spanish.)

That being said, I want to say that, you know, I think Supervisor Gioia and Board Member Takvorian have articulated a couple of things that colleagues from the State Assembly that I represent here on this body have raised to me to convey on this item, not with the intention of tabling, killing the item before us, or just completely moving in a different direction, but simply to raise the concerns as it relates to legislative input.

And perhaps the Joint Legislative Committee on Climate Change Policies could serve as a vehicle to allow for both the Senate and the Assembly to weigh in on the matter and give some direction, shed some perspectives that could maybe lead to the continuation of this conversation.

That being said, I -- you know, I want to tell you that I think that California can play a role internationally. But the concern I think also lies with the work that we have before us here in California in Indian country, in disadvantaged communities throughout California. And the message that may be received is that we may be moving in a direction without really taking care

of the home first. And we've heard that message time and time leading up to this conversation.

I'm of the mindset, and truly believe, that we have the organizational capacity here at CARB to, as they say, walk and chew gum at the same time, but we have a significantly sensitive issue before us that we heard clearly today is a major concern.

Now, I do want to just differentiate the perspectives that we heard in public comments. On one hand, we heard, no, we don't want this from members of the audience who took the opposing position, and very little of we see that there's room for improvement for the policy standards that are before you. So on one end, the question is do we delay to have additional input that perhaps may result in the same outcome of, no, we don't want this, or does that additional input improve the standard that's before us, right?

And I don't know that that ultimately is the case. I know there are groups in the environmental justice community that want to have a say and ensure that we're not picking winners and losers in the work that we're doing to address climate work in our communities.

But, you know, look, I'm here to serve on behalf of my colleagues in the Assembly. And I think that the comments that have been raised by two board members, I

think are reflective of some of the concerns that have been raised. And so those are the comments that I wanted to share.

CHAIR NICHOLS: Thank you. I -- before we sort of continue on with sort of what do we do, I do want to again turn to staff, because this has been a very lengthy process, with a lot of workshops and a lot of opinions expressed. And I, too, was struck by the fact that people either said this thing is terrible or they say you should adopt it.

I didn't hear anybody saying I'd like it if you could just fix this section or change that about it. And I don't know whether there's any indication that if we did say, you know, here's your opportunity to strengthen the standard, whether we would find people who actually wanted to do that or whether they just really want to reject it.

Yes.

ASSEMBLY MEMBER GARCIA: Well, I will say that we did hear about the issue of leakage, right?

CHAIR NICHOLS: True.

ASSEMBLY MEMBER GARCIA: We did hear about legislative authority, if questioned.

CHAIR NICHOLS: Those were concerns. You're right, they were raised as concerns.

ASSEMBLY MEMBER GARCIA: And I don't know if

those are -- or can make up part of the improving of the potential standard, but certainly those are some things that I wrote down.

CHAIR NICHOLS: Yeah. I'm -- I understand. Jason, do you want to comment further?

ISD CLIMATE CHANGE PROGRAM EVALUATION BRANCH
CHIEF GRAY: Sure. No, really good discussion.

I think a lot of the comments that came in in the public docket before -- during the written testimony portion, before today -- woops. Sorry. I'll not talk with my hands -- focused on improvements that folks, both on the supporting side, and the opposing side, and the neutral side, thought that could be made moving forward with the standard.

So even a lot of the folks that came today to support endorsement, in their written testimony had ideas of how to strengthen different elements of it. We did strengthen some of those elements in -- after the written comment portion, including requiring adherence to the GCF principles of engagement with indigenous communities.

But I think many of the supporters also had areas where they would like to see improvements. And I think we heard a potential forum for that through the indigenous working group of the GCF to test it out, to work directly for that forum to work with indigenous communities and

those jurisdictions in which they live, and others who were interested in helping improve that process.

So even those today I think that said just go forward and endorse it in their written testimony also said we think there's room for improvement. And I don't think staff would ever say we do a document that doesn't have room for improvement. I think there's space for that.

CHAIR NICHOLS: Well, I know it was, to some extent, an accident of timing. But the fact that we had the report earlier today on what's going on with the Natural and Working Lands Policy for the State of California is somewhat fortuitous, because the two of them logically could be linked together.

And so in thinking about how to move this forward, because I'm -- I'm not in favor of tabling it, because tabling things just leaves them hanging in space. I want to have a specific set of directions and a way to work -- to keep working on this that would be more likely to get to success.

So it seems to me that -- although, I know it's possible on an emergency basis to meet earlier. It's not likely that the Legislature is going to reconvene before January to take up this item. And I also think that we've been indicating a strong desire to get an earlier action

than the one-year report back that was being proposed for the natural and working lands strategy, and had said, you know, six months, maybe less than six months, could they get to us, you know, with something that looks more like a real action document.

Maybe we could link these things together and bring them both back in front of the Board within, you know, something like a 90-day period. Maybe that's too ambitious, 120 days okay. But ask the Legislature then through our -- through the good offices of our Assembly Member to convene the joint committee and have us at -- at least a discussion session before that.

I see Senator Florez had a idea.

BOARD MEMBER FLOREZ: Yeah, just to add to Diane's comment about the -- and our Assembly Member's, I think just hearing in the length of the hearing today, I think a pause, or 120 days, would be a good thing. And linking it to what our policies were earlier on the lands conversation I think would be something we should think about.

Because I think at the end of the day, Hector and I were just talking about resolutions that came to the Senate or the Assembly versus bills. And it seemed as though the resolutions had a much lengthier conversation in many cases than bills. And the reason for that it's

philosophical. And I think what we're having here is a very deep conversation, and yet a real impact to the communities who are here.

And I think the frustration is kind of where you start. You know, I think I joined this Board saying, you know, let's focus on California first and the world second. So it's not going to be a surprise where I'd be on this particular issue to a lot of folks.

But even before that, even before the Air Board moved into this issue of AB 32, as a Senate member looking at whether to vote on AB 32 at the very beginning of this as it moved through the Senate, I think the issue is and always was for me whether or not we should look at carbon emissions to be reduced at the source.

So in other words, in the old days, it was the source, there was a penalty, and we moved forward. And this was the Air Board prior to the stacking of carbon, if you will. And then we moved to carbon, and it seemed that -- and my worry even then was that the Board was going to be less focused on pollution, more focused on carbon emission. And when you focus on carbon emission, then we begin to talk about offsets and trading of carbon and markets.

At the end of the day, they're both linked in some way, carbon and pollution are. You know, what is a

subset of each other? Who knows. But in some sense, it is very much linked. And I think the philosophical conversation to be linked with what you said, Mary, at the very beginning of what we're doing here with lands is a very positive conversation to have.

I think what we do here and with carbon affects pollution, pollution affects carbon, whether it's at the source, I would probably say I would prefer it to be there; whether it should be put in a offset, not much in favor of that; and I'm not much in favor of trading. But we are in the system that we are. But I think until we get our system right here in California, maybe we ought to pause and think about what happens in other places.

And it just seems like that's one of the nice things I think you mentioned, Mary, is that giving it that opportunity I think if there is that linkage, it would be a positive step for the Board, and trying to figure out how we kind of move forward, so that would be kind of where I'm at. And I really appreciate the comments of both John Gioia, and I'll associate myself with Diane's comments as well. I thought they were very well put.

CHAIR NICHOLS: Um-hmm. Thank you.

(Applause.)

CHAIR NICHOLS: Okay. I think we're kind of moving in the direction of a resolution here, but I'd like

to hear from others, if there are any other comments from other Board members at this point.

Oh, I could do that. I don't usually make motions, but I could.

All right. I would suggest a motion to move this resolution to our March Board meeting. Too soon? April. All right. April. I stand corrected by my Vice Chair. That we move this item to the April Board meeting, and that we take it up along with a report at least on where we are on our Natural and Working Lands Policy for the State of California. And then in the interim, we seek to have a meeting of the Joint Committee on Climate Change, and an open discussion about those two items, and where we're headed. And that we make sure that we also have an opportunity to consult around the time of that hearing, if not before, with groups that may have suggestions of how to strengthen and improve the standard themselves.

I, too, want to express my appreciation for the staff for the work that they've done on this and their amazing persistence and diligence in wanting to keep alive the role of California as an international player on these issues, because I would be extremely disappointed if I thought that we were turning so far inward that our only interest was in ourselves and, you know, what we could do for ourselves on a problem that has the kind of global

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1 impact that this one does. So I think that's a
2 resolution.
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BOARD MEMBER DE LA TORRE: Second.

CHAIR NICHOLS: Thank you. And a third.

No, a comment. Sorry.

BOARD MEMBER TAKVORIAN: Sorry. I was just going to ask, I wasn't sure what you meant by your comment about -- I like your motion, but I was not sure what you meant about the comment about, that you had made the comment that alternatives should be reviewed, and how were we disincentivizing the use of the rain forests?

CHAIR NICHOLS: I guess I view the -- thank you.

 $$\operatorname{\textsc{BOARD}}$$ MEMBER TAKVORIAN: And could that be in -- so my question is could that be incorporated at least as a --

CHAIR NICHOLS: Yes.

BOARD MEMBER TAKVORIAN: -- initial review in this --

CHAIR NICHOLS: I would include them, not only as alternatives, but as - what should I say - companions, that even if we did it -- even if we did adopt the standard as is with no changes, they still ought to have these other items along with it, because they're equally, if not, more valuable in terms of how California could have an impact on the practices that are going on in other

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   parts of the world. So we could still continue
    potentially to disagree or agree about whether the
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    standard should be adopted, but we'd have these other
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   pieces as well.
             BOARD MEMBER TAKVORIAN: So can we add that?
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             CHAIR NICHOLS: We can add that to the
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   resolution. They should be a part of it. Yes.
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   you.
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             All right. Does everybody understand what the
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   motion is?
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             All right. Then I'll call for a vote, please.
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             All in favor, please say aye?
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             (Unanimous aye vote.)
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             CHAIR NICHOLS: Opposed?
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             None.
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             Abstentions?
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             Great. Thank you all very much.
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             (Applause.)
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             (Cheering.)
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             (Thank yous.)
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             CHAIR NICHOLS: And our meeting is not over.
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   have two more items on our agenda today before the Board
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   breaks.
             So we'll ask you all to celebrate and we'll move
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    on.
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             VICE CHAIR BERG: All right. So as the room
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starts to clear out, we're going to go ahead and move on our next agenda item 18-9-7.

The next item is the cap-and-trade auction proceeds Third Investment Plan, which provides guidance to the Legislature when appropriating money from the Greenhouse Gas Reduction Fund and for the California Climate Investments. This is an information item, and the Board will not be taking action.

California continues to be a leader in climate policy and air quality. The Legislature re-commitment last year to continue Cap-and-Trade Program signals to the rest of the nation and the world that California is serious about taking action to address and invest in climate change. As the federal administration has weakened our nation's stance on climate change, California is committed to even stronger goals making these investments more important than ever.

We all know or we all should know by now that most of our vulnerable population suffers disproportionately from air pollution burdens and increasingly the effects of climate change. The Legislature and this Board have responded by focusing on these communities through many California climate investment programs, including AB 617, Community Air Protection Program, and low carbon transportation

programs.

Climate investment funding continues to represent a critical opportunity aligning our climate and air quality goals, while providing greater assistance to those who need it most.

Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks, Vice

Chair Berg. So as you know, the triennial investment plan is called for under Assembly Bill 1532 and is designed to lay out the investment priorities for the annual expenditure plan. The statute requires CARB to hold two workshops and also to hold a Board hearing to discuss the plan.

The statute calls for the Climate Action Team to provide input on the plan and to participate in the workshops and this hearing. And as you noted, Vice Chair Berg, the Board is not being asked to take any action on the item, as it's an informational item.

So for this draft investment plan, the recommendations reflect input from our State agency partners, the Climate Action Team, and the public. After this Board meeting, we'll transmit the plan to the Department of Finance to submit to the Legislature.

I'll now ask Natalya Eagan from the
Transportation and Toxics Division to begin the staff

presentation.

Natalya.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST EAGAN: Thank you, Mr. Corey.

Today, I will be presenting the draft third investment for California Climate Investments. This investment plan will cover the next three years starting in 2019. First, I'll give you some background on California Climate Investments. Next, I'll present a summary of the comments we received and outline the main recommendations in the plan.

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AIR POLLUTION SPECIALIST EAGAN: Funding for California Climate Investments comes from the Greenhouse Gas Reduction Fund, which holds monies generated by cap-and-trade auctions. The Legislature appropriates the funds to State agencies. These agencies then develop programs and select projects.

The programs are required to facilitate greenhouse gas emission reductions. They must also invest in priority populations and provide other benefits, such as improved air quality and job opportunities.

The investment plan was developed for the

Department of Finance through a broad public process in coordination with other agencies. The plan will provide the Legislature with recommendations on funding priorities as they make their annual funding decisions.

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AIR POLLUTION SPECIALIST EAGAN: California
Climate Investments fund a diverse array of projects and
provide many benefits across transportation, energy,
natural resources, and waste sectors, with just a few of
the benefits listed on this slide.

To date, over \$8 billion have been appropriated to implement Climate Investments programs. There are now 19 State agencies implementing 40 programs that are providing greenhouse gas reductions. These programs are also investing in communities most vulnerable to the impacts of climate change.

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AIR POLLUTION SPECIALIST EAGAN: This investment plan recognizes the Legislature has already committed most of the funds to specific programs to provide long-term stability for major projects. Less than 25 percent of funds may be available for appropriation in the coming fiscal year for a variety of reasons.

First, in 2014, the Legislature committed 60 percent of ongoing funding to transportation and

affordable housing programs. In 2017, the Legislature committed additional funds to fire prevention and other activities that may account for 15 to 30 percent of funds.

We also don't know what amount of money future auctions will bring in, and the number of allowances that will be available in future auctions will decline over time. These obligations and uncertainties are important to keep in mind as we discuss the plans's recommendations.

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AIR POLLUTION SPECIALIST EAGAN: Now, I'd like to discuss this investment plan, which builds on the success of the existing Climate Investments programs. This plan focuses on how to make the existing suite of programs even more effective at reducing greenhouse gases and providing many other important benefits.

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AIR POLLUTION SPECIALIST EAGAN: The public process for the investment plan, included two workshops, one in Fresno and one in Los Angeles. Eleven panelists representing -- excuse me -- Climate Investments programs heard directly from community members, and this slide summarizes their comments.

Most comments were supportive of both the investment plan and California Climate Investments programs. People did identify areas for improvement and

these are reflected in the plan's recommendations.

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AIR POLLUTION SPECIALIST EAGAN: The feedback we received resulted in two key recommendations. First, people wanted investments to focus more on communities. There was a lot of support for programs like Transformative Climate Communities, and Community Air Protection. These programs fund coordinated projects. And project leaders go into communities, solicit input, and design projects that are shaped by the needs of the community.

The plan also is recommending the Legislature focus investments on programs that continue to reduce greenhouse gases and incorporate other legislative priorities like low carbon transportation and resiliency. We also heard that programs with predictable funding from year to year have significant advantages. These programs can establish long-term relationships with communities and each other to enhance outreach, technical assistance, and long-term planning.

Funding stability also helps agencies be more creative, and aim high to implement projects that will support California's low carbon future for decades to come.

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1 AIR POLLUTION SPECIALIST EAGAN: After today's public hearing, the Department of Finance will finalize 2 3 the Third Investment Plan and transmit it to the 4 Legislature for their use during the 2019 budget process. 5 Thank you for your time today. 6 VICE CHAIR BERG: Thank you very much. 7 Board members, do you have any questions of 8 staff? 9 I'm sorry? 10 Secretary Rodriguez, are you joining us 11 to -- with some input? CalEPA SECRETARY RODRIGUEZ: 12 There we go. 13 (Laughter.) 14 VICE CHAIR BERG: Welcome, sir. 15 CalEPA SECRETARY RODRIGUEZ: It's easy up there 16 rather than down here. 17 So I will be very, very brief. I know that 18 you've had a very, very long day. And I'm here because we 19 take the instruction from the Legislature very seriously. 20 And the Legislature has directed the Climate Action Team 21 to provide testimony to the Board when it's looking at the Investment Plan. 22 23 Why do they do that? Well, you know, it's the --

Climate Action Team, as you all know, consists of

representatives from all the boards, departments, and

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agencies within California that have some piece of this very, very complicated climate puzzle that we're dealing with on a daily basis.

An it really is the Legislature's effort to bring us out of our silos. I really hate that term, because over the last seven years we've really tried to work very hard not to be siloed. But it really is designed to bring us out of our silos to make sure that all the boards and agencies are working together, and discussing our various programs. Because as you look at the climate issue, it involves all the programs within the State of California. It involves transportation and vehicle miles traveled. It involves sustainable communities planning. We have to change our energy sources. We have to use our energy more efficiently, and we need to make sure that all our programs are working together to ensure that we do that.

So I'm very proud to say that we've been working with the staff on the development of the investment plan. We have had representatives from the Climate Action Team at the workshops. And we think that you've got before you an investment plan that has benefited from this collaborative effort. It does build on the experience that we've developed over the previous investment plans. And it provides you with a suite of programs that will reduce greenhouse gas emissions, help us to sequester CO2,

help us to respond to the changing world that is around us.

So we would endorse the plan. And I also want to add that we are proud of the fact that it really is a plan that really provides programs that will benefit all Californians, including those who are already overburdened by pollution, and -- or those communities that are low-income communities or don't have resources to deal with some of these issues on their own.

That's not just a statutory requirement that we provide investments in those communities, but it's a moral requirement as well. So we think it's a very, very good investment plan. And I would encourage you to submit it to the Department of Finance and get it to the Governor, the Govern-elect and the Legislature as well.

So that's my testimony, and unless you've got questions, I'm ready to let you move on.

VICE CHAIR BERG: Well, we want to thank you for taking the time to come down and address us and to give that words of wisdom, and also to encourage us, because this is a critical part of what is going to help us make that transition. And so thank you, sir.

CalEPA SECRETARY RODRIGUEZ: Okay. Thank you.

VICE CHAIR BERG: We also have Ashley

Conrad-Saydah. Would you just like to make a quick

comment?

2 MS. CONRAD-SAYDAH: Sure.

VICE CHAIR BERG: Please.

She is of course we know because she was with us earlier on national lands.

MS. CONRAD-SAYDAH: Yes.

VICE CHAIR BERG: Deputy Secretary for the Climate Policy at CalEPA. We'd love to hear from you.

MS. CONRAD-SAYDAH: Yes. Of course, Matt is my boss, so he captured everything perfectly.

(Laughter.)

VICE CHAIR BERG: Well, I understand. You can -MS. CONRAD-SAYDAH: But I will -- I will add
that, you know, Matt echoed thanks for the staff. And I
think it's also important just to recognize that this plan
and all of the work over the last many years of
implementing the Greenhouse Gas Reduction Fund benefits
from 20 to 25 agencies at any given time working together.

And it's herculean effort to work together and get all of this money out the door. And I think we're seeing Californians benefiting from it across the state. So we really appreciate the staff, all of you, and the work being done on the ground to make sure that these investments are reaching Californians and reducing emissions. And we look forward to seeing what the next

Governor does to take this investment plan and move it again to more Californians.

So thank you so much for having us today. And, of course, I just echo everything Matt said.

VICE CHAIR BERG: Thank you very much, Ashley.

And then do we have a representative from the Department of Finance?

Welcome. Thank you for being with us on a Friday almost evening. Appreciate that.

MR. ALMY: Yes. My pleasure. Thank you for having me. My name is Matt Almy from the Department of Finance, otherwise known as the other Matt.

(Laughter.)

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MR. ALMY: First and foremost, I would like to express my sincere appreciation to the Air Resources Board staff for their efforts in coordinating the public workshop earlier this year, as well as drafting the Third Investment Plan. I am looking forward to our continued collaboration in the coming year.

The development of the cap-and-trade investment plan through public workshops provides an opportunity for extensive public input in the identification and -- of priority programmatic expenditures which ultimately informs the decision-making process on cap-and-trade expenditures.

Today's hearing is a necessary next step before we finalize the three-year investment plan and submit it in conjunction with the Governor's budget.

Thank you.

VICE CHAIR BERG: Thank you very much Matt. And thank you for the partnership. We really do appreciate it. And we'll get that right over to you after we hear what other improvements we could make.

Well we do have nine people set up to testify.

If you wouldn't mind, keeping track of your name and come down if you're the next speaker. That will help us all get out to Friday dinner.

And so, Thomas, we'll start with you.

MR. SHEEHY: Great. I'm delighted. Thank you so much. I know it's been a long day. And I admire everyone's stamina up on the dais. I know it's not easy. I'm Tom Sheehy. I'm here today on behalf of the Air Conditioning, Heating, and Refrigeration Institute. AHRI is a national trade association made up of about 300 manufacturers of HVACR equipment, both commercial equipment, as well as for homeowners.

AHRI has been engaged with the California Air
Resources Board rulemaking process to reduce HFC emissions
from stationary air conditioning and refrigeration
systems. We very much appreciate working with your

technical staff here. AHRI has provided your staff with a number of different suggestions on how to make these regulations workable to achieve the HFC reduction targets defined in SB 1383, which AHRI supported and continues to support.

To accomplish the incentive program established in SB 1383, AHRI believes that California needs a defined program and a dedicated funding source to promote the adoption of these different refrigerant technologies, so that we can achieve the short- and long-term climate benefits that we're all working for, also the energy efficiency and the other benefits that come along with this.

We believe that the incentive funding allocation should depend on -- should depend on many considerations, including conversion to maximize reduction of greenhouse gases both from direct and indirect emissions, and from refrigeration and air conditioning equipment. The incentives should ensure that there's room for innovation by including options for multiple refrigerants. With these goals in mind and to maximize GHG reduction and accelerating conversion to higher efficiency products, we would like to make the following suggestions on the program.

We would recommend that the incentive program be

funded. Funded projects should be demonstrated best in class greenhouse gas emission reduction, including the impact on refrigerant emissions and emissions related to energy consumption and climate zone. We believe that CARB should fund incentives for conversion of existing commercial refrigeration and AC systems that can achieve -- we believe can achieve as much as 60 percent or greater reduction in GWP. This type of incentive will also be especially important for low-income and environmental justice areas of the state.

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We also believe that funding should be made available for a range of replacement refrigerants so that we don't inhibit innovation and we don't pick winners in the marketplace. And ultimately, we think that this will lead to lower emissions in all applications by setting funding requirements in 750 GWP for AC systems and 1,500 GWP for commercial refrigeration, existing bases will be able to be addressed more quickly in our belief.

We also support the requirement that funded projects ensure proper installation and maintenance of alternative refrigerants and air conditioning equipment in order to maximize energy efficiency and minimize emissions.

I'm almost done, Madam Chair.

AHRI also supports regulations that encourage

recovery, reclamation, and destruction of existing
higher -- high GWP refrigerants and funding to enable an
enforcement structure that ensures that counterfeit
reclaim refrigerants are not being sold on the market in
California.

Given the importance of reducing HFC emissions, I will just close by saying thank you very much for the opportunity to provide our recommendations for you today. I know it's been a long day. Appreciate your patience and the ability to testify today.

Thank you very much.

VICE CHAIR BERG: Thank you very much for staying with us and for testifying. I am going to go ahead and reduce the time to two minutes, given the lateness of the hour, as well as we do have another item to hear after this. And so, if you wouldn't mind, when you start, start exactly with what you want to recommend, and that would be really helpful for all of us.

So our next --

BOARD MEMBER GIOIA: And thank you, Madam Chair, because some of us have to leave to catch a train, or a plane, or something, and I know you want to keep a quorum for the next item, because it's an action item.

VICE CHAIR BERG: Yes, that is correct.

Yes, sir.

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BOARD MEMBER FLOREZ: Madam Chair, just -- I know 1 it's a long hearing, but I -- I'm just wondering. I don't 2 3 meant to interrupt this, but the next item is an action item. Why? 4 5 Maybe staff can -- maybe staff can --6 VICE CHAIR BERG: Well, maybe they could come up 7 with that, so we could get through this one. BOARD MEMBER FLOREZ: Yeah, I'm just wondering if 8 9 we could get through this and carry over the next item to 10 the next meeting. 11 VICE CHAIR BERG: Why don't they think about that 12 while we finish up --13 BOARD MEMBER FLOREZ: Okay. Maybe staff can 14 think about that while we're doing that. 15 Thanks. 16 VICE CHAIR BERG: -- so we can -- so we don't 17 have a break, okay? 18 BOARD MEMBER FLOREZ: Yes. 19 VICE CHAIR BERG: Okay. Mr. Gonzalez. 20 Thank you, sir. 21 MR. GONZALEZ: There we go. I'll make this 22 quick. 23 My name is Eduardo Gonzalez. I'm the director of

San Joaquin Valley Rural Development Center, and the

director of the San Joaquin Valley Regional Broadband

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Consortium at California State University Fresno.

Today, I'm here representing the Regional Broadband consortiums from throughout the state to bring awareness of the advantages of broadband in helping reduce greenhouse gas.

First of all, I would like to thank you the Board and staff for meeting with us and considering the comments that you have in front of you we submitted, by consortiums and CBOs from throughout the state encouraging staff and the Board to consider broadband as a greenhouse gas reduction strategy.

In show of hands, how many of you have broadband at home?

(Hands raised.)

MR. GONZALEZ: Everybody. Well, thank you. You're already doing your part in reducing greenhouse gas.

Broadband is obviously a strategy. And that being said, the communities of the San Joaquin Valley, unfortunately we don't have that opportunity. As you know, the San Joaquin Valley has the worst air quality in the state among worst and highest, and other topics; including highest disadvantaged communities in the state, highest water shortage, largest digital divide, and highest poverty and unemployment rates in the state.

Yet, the billion dollar ag industry is -- in the

San Joaquin Valley is vital to the economy in California and key to reducing the greenhouse gas. Obviously, on your map, starting your meeting you show that private land was almost owned by 39 percent, most of which is in the Central Valley, right?

And efforts to demonstrate the value of broadband the California Emerging Technology Fund provided funding to Fresno State to develop and implement an ag tech pilot project in Fresno County. The results demonstrated that ag tech combined with broadband infrastructure in the farm and the right broadband speeds helped to reduce water usage by 16 to 20 percent utilization of precision irrigation and wireless water sensors.

The project also showed reduction in greenhouse gas emissions by 10 to 12 percent, and increased crop yield between 10 and 20 percent, depending on the type of crop. Overall, the broadband was key to the success of the project.

We urge the broad -- the Board and the staff to embed broadband in all funded activities moving forward.

Thank you.

VICE CHAIR BERG: Thank you very much.

Ah, Mr. Hernandez. Thanks for staying with us all day.

MR. HERNANDEZ: No problem. If this moves fast

enough, I'm here for Electrify America too.

VICE CHAIR BERG: Okay.

MR. HERNANDEZ: Yeah, so just starting -- I'll try to get this done in two minutes. One of the biggest Issues that our organization has with this current investment program is the structural barriers for allowing greenhouse -- the Greenhouse Gas Reduction Fund to reach rural communities.

For example, the TCC program allows unincorporated communities to benefit from planning, but not -- but does not allow unincorporated communities to benefit from implementation funds. Also, programs like the Low Income Weatherization Program do not adequately address poor housing stock in the San Joaquin Valley that would necessarily prevent -- or that would be a barrier for, you know, incorporation of rooftop solar.

Another concern that we had with -- with this most recent revision was the language in regards to our request to address negative local impacts. In our letter dated -- our last letter dated September 14th, we posted the request that CARB further develop policies to prohibit negative local impacts from GGRF investments.

And the response that we received was that adding specific requirements for the established GCI programs is not within the scope of the investment plan. However, we

feel that an effective GGRF expenditure plan requires conformity with various pieces of legislation, such as AB 398, which quote as language to ensure -- the quote begins, "Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities, and also ensure that activities undertaken pursuant to regulations complement and do not interfere with efforts to achieve and maintain federal and State ambient air quality standards, and to reduce toxic air contaminant emissions".

Furthermore, we do appreciate the prioritization of community engagement and we request that you reward projects that exclusively incorporate meaningful community engagement throughout the planning process from development to implementation, because we found that's the best model for these type of projects.

Almost done.

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VICE CHAIR BERG: I think our time is up.

MR. HERNANDEZ: Okay. Please do the rural set-aside. We've been asking for years. That's a really good idea to ensure that low -- small communities actually can benefit.

Thank you.

VICE CHAIR BERG: Thank you.

Chelsea?

1 MS. WALTERSCHEID: Here.

VICE CHAIR BERG: Oh, I'm sorry. Thank you.

Good evening.

MS. WALTERSCHEID: Good evening, Vice Chair, members of the Board, and staff. Thank you for the opportunity to speak in front of you. My name is Chelsea Walterscheid. I drove down today from Truckee, where our snowpack originates.

I work for the Sierra Business Council, a non-profit network of more than 4,000 businesses, local government, and community partners working to foster vibrant, livable communities in Sierra Nevada.

Sierra Business Council manages the Gold Country Broadband Consortium. Our territory is a five county area that includes some of the worst connectivity in the state. We are extremely rural and are some of the last to acc -- last areas to have ubiquitous internet.

California, as a leader in air quality, should understand that broadband is absolutely a green strategy that will reduce greenhouse gas emissions. As a rural territory, including many disadvantaged communities, our citizens have to travel long distances to conduct daily businesses.

Our vehicular trips are frequent and lengthy.
Without broadband, people cannot work from home, hospitals

and clinics are often many towns away, and colleges are not in walking distance.

Business, health, and education in rural areas are massive consumers of vehicular hours. Digital inclusion is vital for offsetting these trips, and is essential as green strategy to help the State achieve its goals for reducing greenhouse gas emissions.

We ask you to embrace strategies for digital inclusion in every investment from the Greenhouse Gas Reduction Fund.

Thank you.

VICE CHAIR BERG: Thank you.

MR. HUBBERT: Good afternoon, Madam Vice Chair.

VICE CHAIR BERG: Good evening.

MR. HUBBERT: Thank you, Board members.

I'm Seth Hubbert. I'm the executive director of Tech Exchange. We're a social impact organization serving the Bay Area. We are dedicated to digital inclusion. So we help disadvantaged community members sign up for affordable home internet. We provide them digital literacy trainings, and we refurbish donated computers to provide them to the community.

We support community members in communicating with their doctor through health care portals, performing online banking, accessing online educational opportunities

and public services, and even setting up home businesses.

And all of these activities reduce trips, reduce miles traveled, and are a direct strategy to reduce greenhouse gas emissions.

Innovation and technology have a huge potential in reducing greenhouse gas emissions. However, this will go unrealized if bold action isn't taken to support the 31 percent of California residents that are unconnected and underconnected.

There's another area of our work that directly supports GHG goals, and that's computer refurbishment.

Because of cost, many underserved residents and supporting agencies such as ours utilized refurbished hardware as a portal of getting households online.

We're still a growing operation. Last year, we refurbished 4,000 computers for the community. And using EPA's Environmental Benefits Calculator, these 4,000 computers had an air emissions savings of 11,000 metric tons, which is the equivalent of removing 2,300 cars off of the road.

The 4,000 computers also provided an energy consumption savings equivalent to powering 1,300 homes for a year. Overall, one dollar invested in our organization yields \$1.32 in environmental benefit in addition to the social, economic, and educational benefit that our

services provide. And these numbers only for our 4,000 computers, which is a tiny share of the 150,000 computers that Americans discard daily.

We appreciate staff's time in meeting with us.

And as written in the draft plan, it's recommended to seek alignment with agencies and existing programs. Because internet access paints such a wide brush, we're following this recommendation because of the multiple touchpoints digital inclusion has. And we encourage this to be incorporated in all strategies going forward.

Thank you.

VICE CHAIR BERG: Thank you very much.

MS. WRIGHT McPEAK: Madam Chair, members of the Board. I'm Sunne Wright McPeak. Apparently, Alfredo and I both have poor handwriting.

(Laughter.)

MS. WRIGHT McPEAK: I'm here with the California Emerging Technology Fund, and to thank you for listening, and your staff for meeting with us for considering our input, and to urge you not only to -- I guess, you're not acting on, but to accept the investment plan, but to take this opportunity to voice how important broadband high-speed internet access can be as a green strategy.

The communities that we work with every day are the most disadvantaged communities, the same priority

populations that you seek equity for. And we know you can achieve that equity in your greenhouse gas emissions, if we have ubiquitous broadband.

It's your leadership at this moment in time that will make all the difference. Assembly Member Garcia authored the Internet for All Now Act. We are encouraging Caltrans and the California Transportation Commission to embrace broadband as a way to have virtual trips offset real trips. We're encouraging the High-Speed Rail Authority to accelerate the incorporation of broadband, so we can get a signal into ag fields to release greenhouse gas emissions. And I think it's important to note that all of the energy utilities, particularly the IOUs, have addresses for 30 -- only 35 percent of the their low income customers. So by definition, they cannot provide the same equity in energy efficiency.

So we come to you today to ask for your speaking out on this investment plan to incorporate broadband as a green strategy.

Thank you.

VICE CHAIR BERG: Thank you very much.

BOARD MEMBER SPERLING: Could I ask one question

23 on that?

VICE CHAIR BERG: Yes. Could we ask a question,

25 please?

MS. WRIGHT McPEAK: Yes.

BOARD MEMBER SPERLING: You've made great contributions to the state. Are there any quantitative analyses that have ever been done that we could ever use to support what you said?

And I guess I would say, you know, if you do, can you pass them along?

MR. WRIGHT McPEAK: We have some data, Dr. Sperling. An example is there's been lots of quantification of the benefits of telemedicine, telehealth. You heard Chelsea talk about long trips to doctors in rural areas. The data that is the most compelling is 40 percent of all follow-up trips to hospitalization can be offset, if people are monitored at home.

In working with the California Transportation Commission and Caltrans in incorporating broadband into their corridor planning. We're now working with SCAG to actually submit a proposal to Caltrans to quantify what that could mean.

We know by definition however that our most low income customers, for example, go to DMV to pay in cash. They'll go to SMUD to pay in cash. Those are trips. So we do need to quantify. We do understand, as you just heard on the ag side, however, 20 to 40 percent increase

in efficiency, if we just have signals into the fields. And that we don't have today.

BOARD MEMBER SPERLING: Thank you.

VICE CHAIR BERG: Thank you. Welcome, Mr. Mills. And again thank you for staying with us all day.

MR. MILLS: You know, thank you Madam Chair and members of the Board. And I need to reciprocate that thanks, because you just spent over nine hours working exclusively on natural resources. It is rare that our sector gets the -- a full day's attention from the Air Resources Board. It was a really thoughtful and thorough discussion on a lot of agenda items. So thank you to staff thank you for the Board for that opportunity.

On the investment plan, Cal -- Chuck Mills,
California ReLeaf strongly support the recommendations
on -- and moving the investment plan forward. Certainly
investments in existing programs, longer term investments.
We saw the Legislature take direction in that with the
forest health toward the end of this session. Continued
investments in underserved areas. With relation to
natural resources, appreciate the discussion there. And
I'd be remiss in not recognizing that one of the biggest
champions at the State legislature that wants to see this
investment is Assembly Member Eduardo Garcia. We hope to
work with you again on that effort. Thank you so much.

And then I also need to give a shout-out to the staff for giving a shout-out to our own California ReLeaf small grants program in the community grants discussion on page 17. We really are proud of that program. We like to think that it does, in fact, encourage folks to be more supportive of the CCIP, and also build capacity. We've seen that happen, as some of our smaller grantees go on to apply for larger grants. We'd love to see other sectors embrace that.

And I also need to acknowledge that the formation of that program did not happen in a vacuum. It was a lot of input, including my colleagues at Greenlining Institute and Coalition for Clean Air. So shout-out to them.

And then if this is the direction that either the Board or the Legislature wants to take, we're happy to share with you the modeling for our program and act as a resource. So thank you again.

VICE CHAIR BERG: Thank you very much.

MR. ARREDONDO: Good evening, Madam Vice Chair and members of the Board. Alfredo Arredondo again.

My penmanship approved a little bit, but the name of the group is misspelled, so I've still got to work on my writing here. On behalf of Audubon California really wanted to thank the work of staff and you all as Board members in developing the three-year expenditure plan as

currently drafted.

Really wanted to just emphasize the importance of multiple year expenditures, which hopefully the administration would carry that advice forward, and the Legislature would adopt. And I know that as was mentioned by my colleague from California ReLeaf we do have really good champions in the Legislature that have been very interested in seeing natural and working lands investments increased.

And so for those reasons, we're really happy to be very supportive of the proposed expenditure plan.

Thank you all.

VICE CHAIR BERG: Thank you very much.

And, Kevin, we'll have you wrap us up.

MR. MAGGAY: Good evening, Vice Chair, Board members. My name is Kevin Maggay. I'm with SoCalGas. And I understand that this is an informational item, and it's going to move forward today. But I did want to make comments in hopes of continuing the discussion we've been having around incentives.

I'm going to start out with a quote from the investment plan. "AB 1532 requires that funds facilitate the achievement of feasible and cost effective greenhouse gas emission reductions, and the Legislature and the public need to know whether investments are a good value",

end quote.

So spending the money wisely and ensuring benefits is obviously an important thing. However, the investment plan quickly dismisses the cost effective requirement. And this is explicit in the statute, and shouldn't be dismissed that easily, particularly when greenhouse gas emission from the transportation sector have increased.

We recommend that consistent with AB 1532 cost effectiveness be prioritized in the funding plan, and in the future allocations taken by this Board.

Next, the investment plan does not address the balance or imbalance of fund -- issue of funding for transformational projects and funding projects that get immediate benefited. We in the natural gas industry are always told to look at funding holistically, which is difficult, because programs are workshopped and approved individually. And we thought that this may be a good opportunity to examine funding holistically, but there is -- but the issue of imbalance wasn't -- was not addressed.

Earlier in the summer during the VW settlement
Board meeting, there was a robust discussion about
balanced funding. And we thought that the Board directed
staff to take a deeper look into the issue, but we haven't

seen anything yet.

We continue to recommend that ARB make the effort to quantify the balance or imbalance of near-term versus long-term emission reductions.

Lastly, we would also like to see additional transparency in the annual report. The annual reports focus on how much has been spent and the anticipated emission reductions, which are good metrics, but we would also like to see actual emission reductions to date, quantified co-benefits, and lessons learned and areas of improvement.

This is an unprecedented amount of funding, and agency has -- or no state has taken this on. And we would like to see the changes that are made for the programs moving forward.

Thank you.

VICE CHAIR BERG: Well, thank you very much, Mr. Arredondo

And now our final speaker, Mr. Rushing.

MR. RUSHING: Thank you, Madam Speaker, Board members. It's not the first time I've been the caboose, and I'm happy to be caboose today.

I am Rocky Rushing representing Coalition for Clean Air. CCA has commented on the proposed Third Investment Plan via a letter submitted by the California

Climate Equity Coalition, which we are a member. And my talking points from hereon say a lot of nice things about the proposed plan and about staff. And I'll just ask that you consider those. And I'll get to the point.

The draft plan doesn't quite capture the crisis California faces as a result of growing GHG and criteria emissions generated by our transportation sector. We have some of the worst air in the nation. When the California wildfire smoke clears, if it ever does, 90 percent of Californians will still be living in areas with unhealthy air at some point.

As you know, the transportation sector is the greatest emitter of GHGs in California with trucks and cars as primary culprits. Emissions from this sector are trending upwards as is gasoline consumption. State law requires the reduction of California's overall emissions by another two-fifths by 2030, a tall order without significant reductions from the transportation sector.

We applaud the strides made toward increasing the number of zero-emission vehicles on our roads and highways, and incentivizing diesel conversion. However, as our -- Alfredo mentioned earlier, multi-year investments are needed, and multi-year investments are needed now in zero emission and near zero emission means to move people and goods to meet our clean air and climate

goals and mandates.

CCA believes the proposed the Third Investment Plan could better reflect this critical need.

Thank you so much for your efforts, and thank you for your time.

VICE CHAIR BERG: Thank you very much.

Staff, could you respond? I heard a couple of -before we go to Board comments, so that maybe that will
help answer them. And I heard about three different areas
that they'd like you to consider. Broadband got a lot.
And also I was interested in the negative local impacts
that one of our speakers was talking about, the multi-year
investment, and, of course, the best-in-class on the
refrige and energy efficiency. Those were the items I
came away with.

TTD CLIMATE INVESTMENTS BRANCH CHIEF BOTILL:

Sure. Happy to. Matthew Botill, Branch Chief of the Climate Investments Branch.

And I want to first start off by thanking the commenters for their time and for their feedback on the program.

When it comes to the broadband questions, really appreciate learning more about this issue over the last few months, in terms of how broadband can support the deployment of technologies and strategies to reduce

greenhouse gas emissions, and like Professor Sperling, would really appreciate learning more about it from the stakeholders in terms of what kind of analysis they have that helps support that.

We are planning on sharing these comments with Finance as we transmit the plan to them to ultimately transmit it to the Legislature.

When it comes to questions about the rural funding, I think it's also important to look at where the appropriations have gone in the past. So there's been a pretty significant amount of funding that's been appropriated by the Legislature in past budget acts to areas like forest health, and wildfire fuel reduction, agricultural practices, health soils, land conservation, water energy efficiency.

And so there has been, and continues to be, a commitment on behalf of the Legislature and the administration for funding for projects that really get at the type of unique strategies needed in the rural sector for both greenhouse gas reductions, air pollution benefits, and also economic benefits.

You know, certainly this is something that I think the Legislature continues to hear in budget committee hearings and through the budget process, when they consider the annual budgets for GGRF each year. And

I would expect that to continue.

And then on the refrigerant program. So just this last year in legislation, the Legislature passed SB 1013, which was a bill that established a new program for low GWP gas replacement and incentive funning. It doesn't have any funding. And so that was a new program that if they are interested in supporting over the next year, the Legislature certainly has the opportunity to fund. We did mention that bill and the opportunities that reduction in high GWP refrigerants propose -- or provide in the investment plan. And so it is included in there.

Not highlighted, the focus of this investment plan certainly is on what kind of improvements the existing suite of programs and the already large number of funding commitments can continue to improve upon.

VICE CHAIR BERG: Thank very much. Do we have Board questions?

Yes, Supervisor Serna.

BOARD MEMBER SERNA: Thanks, Vice Chair.

So, Matthew, I heard you mention with respect to broadband and intent to simply pass on the comments that were made about it. But I think to Professor Sperling's point, he's not the only one that is hungry for something more than kind of anecdotal information or supposed data relative to trip production, as it relates to the

expansion of broadband, especially in rural areas.

So what could we consider doing besides more than just passing on comments? Because I -- I feel like I'm stuck in a point where I'm fairly convinced, having worked with Sunne and her group in the past here locally to advance broadband in disadvantaged communities here locally in Sacramento, and parts of my district, that it does reduce trips.

Now, I can't put my thumb on it today in terms of, you know, the appropriate metrics to cite, but it's something I feel in my gut that I know is really helping us achieve our mission. So what can we do, what can we think about doing to memorialize a little more firmly than just passing on comments this intent to invest in broadband.

TTD CLIMATE INVESTMENTS BRANCH CHIEF BOTILL: Sure. Appreciate that.

So I think that there's -- there's kind of two key points here. One just to talk a little bit briefly about the investment plan. It is a document that will go to the Legislature in -- in January from Finance. And it's a point in time for the next three years. But that doesn't mean that there isn't an opportunity over the upcoming years on this issue to talk to the agencies that are currently implementing funding, what they're doing

with respect to deploying greenhouse gas reducing technologies and whether or not there's an opportunity there to look at broadband as a part of that process.

So I think there's also an opportunity to talk more with other agencies, and particularly maybe Strategic Growth Council, that have received funding for like research and demonstration type efforts to look into this a little bit more.

And so I think, you know, both within the investment plan going to January, but also longer term, we can continue to work with the broadband consortium folks to understand this a little bit more, and then also connect them with the existing GGRF programs.

BOARD MEMBER SERNA: Okay. I'd certainly like to just conclude by saying that, at least speaking as one Board member, I'd like to make sure we don't lose sight of it. I know we have a lot of moving parts to this, but perhaps, you know, a report back in the not too distant future about the next steps on this particular investment strategy would be something I'd be interested in and perhaps others are as well.

Thanks.

VICE CHAIR BERG: Thank you. And I'll echo that. Dr. Sperling.

BOARD MEMBER SPERLING: I'd like to make a --

perhaps a naive and gentle suggestion that I've made before. Can we kind of edge our way towards some sort of cost-effectiveness analysis, even if it's on a high level programmatic area, all these pots of money, and some sense of -- you know, in the old days, there was a so-called McKinsey supply curve that showed, you know, for all the different ways of reducing greenhouse gases, you know, you could put everything on the curve.

And it sure would -- you know, because we hear about the -- you know, the refrigerants. We hear about, you know, these telemedicine and other broadband options. And I know, as a researcher, it's real hard to quantify some of these, but we ought to be putting some effort into doing that.

So, you know, it's just a gentle suggestion. I know there's a lot of reasons why we do it the way we do. So you don't have to answer, if you didn't want.

VICE CHAIR BERG: It's so noted.

(Laughter.)

BOARD MEMBER SPERLING: Thank you, ma'am.

VICE CHAIR BERG: Any other comments?

Okay. Well, staff, thank you very much. This is an informational item only, so there's no need to close the record. But I would like to again thank Secretary Rodriguez and Ashley for being here. And we have given

some comments, and we will usher that on the way to the Department of Finance.

So thank you, sir.

Senator Florez asked a very good question about the next item.

BOARD MEMBER FLOREZ: Yeah, I just -- just as we jump into this, I know we have the CEO here and he came all the way from Italy. I appreciate that. But I will tell you this is the second time we have put this item at the end of our hearing. And we seem to rush out. This is a \$200 million investment. I do have quite a few questions. I know everyone's flight time is going to conflict. So I'm a little bit at a conflict. I can ask question. And in some case, you might call that running -- you all miss your flights, because I really feel that's what I need to do. This is an important investment. Or we can hopefully hear from the CEO and we can simply vote on this next the period.

And just for the Board, I want to tell you my principal concern. You can weigh it. My principal concern is that when we passed a resolution on July 27th, it said that we should have a consulting with stakeholders. That means pulling people together. And it doesn't mean we wait for people to come ask us whether we pull people together. We pull people together. That did

not occur.

And so I think in that break between now and December, if we could have a stakeholder meeting I think it would -- everything would fit quite nicely. In other words, we passed a resolution saying we should have a stakeholder meeting. That didn't occur. We have a month to do that. We can still hear the item then, and still have that meeting.

And I think at least my concern that -- that a principal concern would be gone. So that's kind of where I was going to go anyway at the end of this. And given that we didn't have a stakeholder concern, I have a ton of questions.

So I'm just going to leave it at that, and just being transparent, and people can make their mind up. It seems like we have moved through a lot of items, but this is kind of an important item.

So I actually make a motion if we could just put this over, if I have a second.

VICE CHAIR BERG: Well, I do -- I understand, but we do have some obligations, because we did post this item, and we do have people that have come to testify. So I'm caught between some obligatory responsibilities. So maybe, Ellen, could you weigh in on this, please?

BOARD MEMBER GIOIA: And I wanted to be able to

make a comment. If I have to leave early, because I do have to catch a train to be at something? It's in the Bay Area. So I may not stay for the full amount. So after the staff, I just want to make a comment.

VICE CHAIR BERG: Thank you.

CHIEF COUNSEL PETER: So in terms of the obligations for a vote to occur, you need eight voting members.

Assemblyman Garcia is an ex officio. So currently we have a quorum, so we can proceed. I'll leave it to Mr. Corey to talk about the schedules. But I do think you're correct that we have people here. It's a noticed item. Maybe we can short-cut the staff report and hear from the members of the public, But Richard, I'll defer to you on that.

VICE CHAIR BERG: Thank you.

EXECUTIVE OFFICER COREY: My suggestion would be, and as Counsel Peter indicated, that the -- we've got a noticed item. We have some folks, just as Senator Florez indicates, I think 16 that have signed up. Some have traveled.

My suggestion would be that we give the staff presentation. We hear from the CEO. The Board may -- and we entertain questions. The Board at that point may determine that it puts off a vote, chooses to vote or

doesn't choose to vote. But my suggestion would be we begin on the item and work through the presentation and get the facts on the table.

VICE CHAIR BERG: So I think that will be the way to go. And at the time we don't have a quorum or the Board decides then to push it over, then we'll make that decision.

BOARD MEMBER GIOIA: How long is the staff presentation?

EXECUTIVE OFFICER COREY: Twenty minutes. And I'm going to ask them to make -- cut five off of that, so 15.

BOARD MEMBER GIOIA: Okay. Can I just then cover something that they may want to cover, because I -- at least put it out there for Board discussion.

One of the issues, and this is relevant to achieving the goals -- or achieving the act -- you know, the investments that are laid out in the plan. I know there's been issues raised about the permitting of the -- of the chargers.

And so while the plan identifies a good amount of money to locate chargers, what I've heard from Electrify

America and others is -- and I've heard this in other

contexts is the many local governments in California don't

have uniform permitting standards for electric vehicle.

And as a former land-use lawyer, I appreciate and understand that, and understand why, and that's not a good thing.

I've had a discussion at the Bay Area Air Quality Management District about how we can come up with some kind of model process. So what I wanted to suggest, and maybe have the staff address, is if we can -- it is powerful if we can come out with some kind of standard that local jurisdictions adopt, sort of -- we've done this -- local air districts have done this with solar permitting. We did this in the Bay Area for a model ordinance on permitting solar.

If we could develop some kind of model that local cities and counties can adopt that deal with some streamlined and easy permitting, because -- because if -- we can have all the good money in the world identified in the plan, but if we can't get it sort of implemented in a timely way because of local jurisdiction's permitting issues. So I think we can play a role in that. And I'd like to ask us to at least consider that, and hear from the staff about that.

VICE CHAIR BERG: Thank you very much, Supervisor Gioia. So why don't we got ahead with the staff presentation. I am going to forgo my introduction, other than to say that this is Item 18-9-11, the last item on

our agenda, and have Mr. Corey go ahead and introduce it.

BOARD MEMBER TAKVORIAN: So I'm just going to say
-- sorry to interrupt you. But I have to leave. I just
tried to change my flight and I can't, and so I apologize
for breaking the quorum --

VICE CHAIR BERG: It is --

BOARD MEMBER TAKVORIAN: -- but I think that's what's going to happen.

VICE CHAIR BERG: That's okay.

BOARD MEMBER TAKVORIAN: Thank you.

VICE CHAIR BERG: We will postpone the vote going over and so --

BOARD MEMBER TAKVORIAN: Okay. And then we can listen to the staff report - I just want to get the process clear - and then still ask our questions when we take it up at the next meeting, is that how that will work?

VICE CHAIR BERG: Well, it seems that that is what we're going to need to do, Richard.

EXECUTIVE OFFICER COREY: It's a decision that is still in front of the Board, right?

VICE CHAIR BERG: I am certainly hearing from the members that we're getting stressed for time. This is an important item, and so I'd like to go ahead and do the staff report. For those that can't stay, please get with

staff, and so you can be brought up to speed. We'll also hear as many witnesses that we can. I will close the record for testimony, and then we will do staff discussion and the vote in December.

CHIEF COUNSEL PETER: And in terms of the other members who have to leave who don't hear all the public testimony, the transcript will be available, and we've done that before. So we'll sit down and walk that through.

BOARD MEMBER TAKVORIAN: Thank you.

VICE CHAIR BERG: Okay. Thank you.

(Thereupon an overhead presentation was

presented as follows.)

AIR POLLUTION SPECIALIST WILLIAMS: Thank you,
Mr. Corey. And good afternoon, Vice Chair Berg and
members of the Board. I'm going to just briefly say that
this is cycle 2 of the Volkswagen ZEV investment
commitment. And it's a 10-year commitment, four cycles.

And Mr. Palazzo will follow us and provide an overview of the Cycle 1 update, but I'd like to skip now to slide eight of the presentation. And go straight into the proposed Cycle 2 investment plan.

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AIR POLLUTION SPECIALIST WILLIAMS: This is an overview of the plan, \$200 million total.

And if we can skip to slide nine.

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AIR POLLUTION SPECIALIST WILLIAMS: The largest investment is for metropolitan areas up to 115 million. In addition to the metropolitan areas that were approved in Cycle 1, we're adding three new metropolitan areas. And all three of those areas are predominantly low income

Next slide, please.

and disadvantaged communities.

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AIR POLLUTION SPECIALIST WILLIAMS: This shows additional investment in our regional route. And of importance is that it will be building out infrastructure in areas that have not seen a lot, including the northern San Joaquin Valley and adjacent mountain communities, California's central coast, and the Inland Empire.

Next slide.

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AIR POLLUTION SPECIALIST WILLIAMS: Electrify America proposes new investment areas, 2,500 to 3,300 level 2 home chargers, that will be no money down, and the development of an incentive web tool targeted toward low income Car buyers. They will be working with transit operators to install charging infrastructure for zero-emission buses and shuttles. And in anticipation of

the inclusion of ZEVs in shared mobility services like Uber and Lyft, they will be investing with partners to facilitate charging of those vehicles.

They will be doing a \$2 million rural pilot program to invest in 35 to 50 level 2 charging stations in areas including, but not limited to, the Central, Imperial and Coachella valleys. And they will be installing renewable generation at select sites.

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important when talking about this level of infrastructure investment that we understand its contribution to the total. And if you look at the chart, you can see that the 18,000 chargers that are in the State currently represent only seven percent of the total. A billion dollar investment from the utilities represents 45 percent of approved and forthcoming installations. And that leaves two percent for what Electrify America's contribution for both Cycle 1 and Cycle 2 equate to, as well as a 46 percent gap that needs to be filled by other public and private investments, so that we can close the state's or meet the state's 2025 needs.

I'd like to skip the next slide to save time.

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AIR POLLUTION SPECIALIST WILLIAMS: And so

Electrify American's proposed Cycle 2 public awareness efforts. They propose to continue to use traditional and social media to increase public awareness of ZEVs and their benefits. Those efforts would continue to be brand neutral and feature both battery electric and fuel cell vehicles. And they would be using marketing to boost station utilization. Messaging would communicate, for each charger: location, charging speed, acceptable payment methods, nearby conveniences, and affordability.

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AIR POLLUTION SPECIALIST WILLIAMS: So now we look at how we measure the content of the plan. This slide lists the requirements that we compare it against. We -- the plan has to serve diverse regions and communities, and describe how infrastructure will be monitored and maintained. ZEV infrastructure must be non-proprietary and ZEV awareness campaigns must be brand neutral.

The plan must include a description of ZEV investments with a explanation of how each one meets goals; an estimated schedule in six-month intervals; and, itemized projection of anticipated creditable costs that accounts for the entire \$200[SIC] investment.

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AIR POLLUTION SPECIALIST WILLIAMS: In June 2016,

the legislator -- the Legislature with the passage of Senate Bill 92 required CARB to: Post investment plans for public comment; hold a public hearing to consider approval of investment plans; report annually to the Legislature, and; strive to ensure that at least 35 percent of Electrify America's investments benefit low income and disadvantaged communities.

The Legislature further stated that Electrify
America should, and Electrify America has committed to:
Report implementation progress to CARB, and; strive to
ensure that at least 35 percent of its investments benefit
low income and disadvantaged communities.

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AIR POLLUTION SPECIALIST WILLIAMS: In July 2017, the Board adopted Board Resolution 17-23 approving Electrify America's first plan. The resolution re-memorialized their commitments to: Strive to ensure that at least 35 percent of investments benefit low income and disadvantaged communities; to include in its reports and evaluation of heavy-duty hydrogen opportunities to include as part of contract award criteria job creation and training estimates, especially among minority women and veteran owned businesses; provide hiring opportunities for qualified residents of disadvantaged communities; implement projects so as to ensure fair competition, and

in a transparent manner that allows for public input, and; execute projects in a manner that ensures investments are self-sustaining and continue to exist after the 10-year period of the ZEV investment commitment.

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AIR POLLUTION SPECIALIST WILLIAMS: CARB posted the Cycle 2 plan on October 3rd. The public were invited to provide comments on the plan through a hosted comment docket online that closed on October 26th. We conducted an assessment of the proposed Cycle 2 plan taking into consideration the requirements of the consent decree, as well as Senate Bill 92, and Board Resolution 17-23, and the comments received from the public.

Staff posted its assessment of the plan on CARB's website last Friday, November 9th. And in its assessment concludes that the plan meets the requirements of the consent decree and reaffirms Electrify America's commitment to the content of both Senate Bill 92 and Board Resolution 17-23.

I'd now like to take at our look comments that were received.

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AIR POLLUTION SPECIALIST WILLIAMS: The vast majority of the comments received are in support of the plan. Comments not expressing support were grouped into

three categories.

The first are those that ask that portions of the investment be reallocated typically to rural and disadvantaged communities, transit, and renewables.

Others asked that CARB require funding of hydrogen production and refueling infrastructure.

Others asked that Electrify America share their metrics used to select sites, as well as information gained from charging infrastructure. Related to this ask, auto industry members asked that Electrify America establish a firewall between itself and Volkswagen, so that Volkswagen cannot benefit from that information.

And the final group of comments addressed the siting of infrastructure, primarily as it relates to either individual sites where other electric vehicle services providers have installed or are installing infrastructure, or to entire areas that the California Energy Commission has targeted for investment under the CALeVIP block grant program.

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AIR POLLUTION SPECIALIST WILLIAMS: CARB will ensure it continues to receive quarterly and annual reports from Electrify America and that they're posted.

We'll also report annually to the Legislature, and we will continue our EV charger planning coordination with

entities such as GoBiz, the Energy Commission, CPUC, Caltrans, Clean Cities coordinators, and others.

We will also evaluate the need to convene additional meetings with electric vehicle service providers.

Finally, as required by the consent decree, the third-party auditor will continue to provide annual reports to CARB and will review Electrify America's implementation and accounting records, conduct select on-site audits, and review all expenses and approve only those that are found to be creditable.

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AIR POLLUTION SPECIALIST WILLIAMS: Electrify
America's Proposed Cycle 2 plan would contribute to
California's 2025 and 2030 ZEV infrastructure goals, help
achieve California's climate and air pollution goals, and
continue benefiting low income and disadvantaged
communities and support up to 1,500 jobs.

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AIR POLLUTION SPECIALIST WILLIAMS: In conclusion, CARB staff recommends that the Board adopt Resolution 18-54, approving Electrify America's proposed Cycle 2 ZEV investment plan. Approval of the plan will allow Electrify America to continue investments providing benefits to California's air quality and its ZEV drivers.

That concludes my presentation. At this time, I would like to invite Mr. Giovanni Palazzo, CEO of Electrify America, to address the Board.

VICE CHAIR BERG: Welcome.

(Thereupon an overhead presentation was presented as follows.)

MR. PALAZZO: So hello. Hi. Thank you. Thank you very much for your time. I really appreciate it. And especially for us, because, you know, I'm not driving in from Italy. Actually, I live in Virginia, but I very appreciate your time here.

So Vice Chair Berg, and members of the Air Resources Board. My name is Giovanni Palazzo. And I am the president and CEO Electrify America.

It is an honor to speak today with you about Electrify America Cycle 2 ZEV investment plan. Before I dive into the details of the plan, which CARB did a terrific job of presenting, especially in this such short amount of time - so thanks for that - I want to briefly introduce myself.

So I began working in electric mobility at Mercedes-Benz Daimler in 2003, where I lead the launch of the smart electric drive at that time. E-mobility barely existed, but we were already installing Level 2 chargers into customer garages. I have been in the clear

transportation space ever since, and I have -- as you know, I took over for Mark McNabb in August who did an amazing job of building a unique, motivated team of impressive experts who simply want e-mobility finally to happen in the United States.

As you may know, I am also not new to the consent decree, and the ZEV investment commitment in the appendix C. Before taking this job, I was responsible for the mobility strategy of VW Group at the global scale. And this gave me the opportunity to work together with Mark McNabb at that time to develop and propose the ZEV investment commitment as part of the consent decree. That's how I had my first extremely positive collaboration with the CARB staff.

I am thrilled to now have the opportunity to lead our implementation of the ZEV investment commitment. I believe that these investments will have a tremendous positive impact on ZEV adoption, on pollution, on drivers, on the people and workers of California.

I thank Electrify America's contribution to encourage EV adoption in the U.S. Is clearly visible already even where we are now only in the middle of Cycle 1.

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MR. PALAZZO: Let me tell you about our progress

in Cycle 1 before we discuss Cycle 2 plan. I am very proud that we have been moving at light speed in recent months. Just a few highlights include: The first community workplace and MUD level 2 charging station recently opened. And we are building ultrafast charging station as fast as permits allow.

We have leased 120 sites in only 14 months since CARB approved the Cycle 1 plan. I remember that we started with eight months of delay, 70 plus ultrafast charging station have been designed, more than 60 permit applications have been submitted, 20 permits have been approved, and five stations are done with constructions. And we will open the first station to customers this month. And by the way, today, we are online with our first station in California in Torrance.

At least nine stations will be open by year's end. We are working almost daily with Governor Brown's team to expedite permitting in order to move even faster.

Our unique DC fast-charging stations will be capable of charging an EV with 20 miles of range per minute. That's unprecedented charging speed, and deploying first-of-kind technology is, of course, extremely challenging for us, as well as for our business partners.

Much more than 35 percent of DC fast-charging

stations at every stage of development are in disadvantaged and low-income communities as you see in this chart here.

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MR. PALAZZO: Beyond infrastructure last week, we launched our Green City car share programs in Sacramento. We received impressive feedback from the local city community, positive coverage into the press.

Our brand-neutral advertising spot featuring the music of the Flintstones, and the Jetsons, and the Chevy Volt is getting massive views. I hope you heard it, you've seen it, or visited plugintothepresent.com.

Our campaign is coordinated and shares the tagline of Veloz recently launched "Electric For All" campaign. Veloz is leveraging Electrify America's match to bring in additional funding. And finally last week, we announce a \$2.7 million program with six community-based non-profit organizations to build education and awareness in disadvantaged and low-income communities.

Across all these different investment activities, Electrify America is striving to ensure that more than 35 percent of investment is in disadvantaged and low income communities. And I thrilled to inform you today that we are on pace to exceed that goal in Cycle 1.

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MR. PALAZZO: Over the past year, Electrify
America conducted a massive outreach and stakeholder
engagement process in order to ensure we included the best
ideas in our Cycle 2 plan. We considered more than 800
commands and suggestions, held dozens of online
presentations and community meetings, and spoke
individually with more than 100 stakeholders.

We talked to academics and national lab experts, automakers, EV charging companies, utilities, community groups, construction companies --

(Sound system interference.)

MR. PALAZZO: I don't know what's going on.

Sorry for that -- and labor groups, environmental organizations, elected officials, and State, local, and federal agency leaders, and, of course, we met with CARB for multiple day-long sessions, and invited CARB leadership to our offices and to our quality control center of excellence.

On October the 3rd Electrify America submitted its Cycle 2 California ZEV investment plan to CARB for a determination that it meets the requirements of the 2-liter partial consent decree.

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MR. PALAZZO: We have been overwhelmed and humbled by more than 60 nonprofit organizations, ZEV

industry players, municipal leaders, and elected officials, and community groups who wrote to CARB to urge rapid approval during the comment period. And I understand this is quite rare.

This tremendous support exists because we listened to California when designing our Cycle 2 plan. There comments ant contributions increase scope and quality of the plan, and we are very, very thankful for their input.

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MR. PALAZZO: The great support being demonstrated for the Cycle 2 plan results in part from our commitment to making economically sustainable investment in disadvantaged and low income communities.

Specifically, we will again strive to ensure that 35 percent of all investments in Cycle 2 is in disadvantaged and low-income communities. Community level infrastructure are the focus in Cycle 2 also. We have added Santa Cruz, Watsonville, Riverside, San Bernardino to our list of communities in which these investments will be targeted, while also continuing investment in Fresno and Sacramento.

Cycle 2 highway investment is focused in the Central Valley, Sierra Mountain region, the Inland Empire, and the Eastern Mojave Desert.

In response to stakeholder input, we have committed to invest in new ZEV infrastructure use cases that are of particular benefit to disadvantaged and low income communities, including our rural pilot program located in the Central, Imperial, and Coachella valleys, investment to support transit services and ride-hailed drivers urged by Los Angeles governments, and a program to finally help Californians add residential charging.

While some of this investment must be tried at pilot scale in Cycle 2, they have the potential to expand in Cycle 3, and, of course, in Cycle 4.

Finally, we have committed that 35 percent of brand-neutral media will be geotargeted in disadvantaged and low income communities. We will keep on funding the work of affected community based organization, and we will introduce new funding to support STEM and workers education.

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MR. PALAZZO: There were only a very few critical commands submitted to CARB regarding Cycle 2 planning.

But I, and the whole Electrify America team, take these concerns very seriously, and see them as an opportunity.

First, a few firms in the hydrogen industry encouraged us to fund projects in that space. I have directed my strategy team to reach out immediately to

these companies to discuss investment opportunities. And although those firms had not previously approached us, we are now in a productive dialogue, remain open to any economically sustainable investment opportunity may come.

Second, Calett and General Motors both call on Electric America to establish a customer data firewall between Electrify America and Volkswagen. Let me take the opportunity to clearly state that Volkswagen has never had, nor will have, access to Electrify America customer data, and we have communicated that to both Calett and GM.

Third, we received feedback on our approach to residential charging. As you know, about 80 percent of charging happens at home. And we have concluded that how more people charge at home will drive ZEV adoption. We developed a detailed approach in the plan to make this happen.

Serving residents of MUD is also critical. And our analysis shows MUD residents are most economically served through ultrafast DC-fast charging station in close proximity to their homes. And this idea is supported also by UCLA researchers.

First, while many companies in DV charging industry, Siemens, EV Connect, BTC Power, SemaConnect, MaxGen, ABB, Efacec, Greenlots, Tesla, Southern California Edison, PG&E, Black & Veatch, and many others, indoors the

Cycle 2 plan and highlighted the positive impact we are having on competition.

A few comments suggested CARB direct our investment away from the markets in which EV charging is most needed. We believe, and I believe, that knowingly building charging station where they are unlikely to be used would be inconsistent both with the consent decree and with the mission of the team of Electrify America.

Finally, I know that some parties have suggested that CARB delay today's decision. I humbly ask you not to do that for a few reasons.

First, we have completed an extensive robust process that started in January this year.

Second, a key lesson from Cycle 1 is that it takes a time to conduct new RFPs, negotiate contracts, place orders for equipment, secure sites, and begin other key development activities in advance of the beginning of Cycle 2.

A decision today will allow us to stick to the plan that we proposed in the Cycle 2 investment.

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MR. PALAZZO: Our team could not have developed a Cycle 2 California ZEV investment plan, were for your such a solid support, without the tremendous input from CARB leadership and staff, starting more than six months ago.

CARB has provided us with invaluable input, guidance, and suggestions that made the plan better. And we are grateful for your time and assistance during the past month.

Building out the largest ultrafast non-proprietary charging network in the United States is a monumental task and we would not be successful without the support and expertise of CARB.

I hope you share CARB staff finding that the Cycle 2 plan exceeds the goal and the requirements of the consent decree. And I hope you follow that recommendation for approval.

Thank you again for your attention and support.

VICE CHAIR BERG: Well, thank you very much for such a thorough presentation. I apologize. We will not be voting today, because I've lost my quorum. But not only that, I think that a robust conversation and hearing from the Board members will be important. We will take this up in December without fail, correct, Mr. Corey?

EXECUTIVE OFFICER COREY: (Nods head.)

VICE CHAIR BERG: And -- but maybe in this next four weeks we'll be able to resolve a few -- it seems maybe open issues that will lead us into a successful December. We are not postponing this because we can't get through it. We're postponing it, because unfortunately

we've run of time.

We are going to hear from with witnesses today, and would hope that you would be able to also stick around because there may be questions.

MR. PALAZZO: I will be happy to reply to the questions, yeah.

VICE CHAIR BERG: That would be great.

MR. PALAZZO: Yeah, absolutely.

VICE CHAIR BERG: So I think we're going to go ahead and go to the witness list to allow people to respect their time for a Friday evening. I apologize we're going to keep you here. But if you don't mind, that's what we'll do.

MR. PALAZZO: That's absolutely fine. Thank you.

VICE CHAIR BERG: Thank you very much.

So please, we're going to do two minutes. And so get right to your points of what you would like us to consider. Also, if you would move down, we've got lots of great seats. It will make you close to the podium, and we'll be able to hear what you have to say. And if you'd love to stay, we'd love to have you come. If you need to go, we understand that.

So good evening.

MR. FERNANDEZ: Good evening Vice Chair Berg and members of the board. Before my testimony, can I ask for

a procedural question? Several members that are listed here had to leave, because of same reasons some members had to leave. Can they submit their comments in a written manner, because they didn't do it before? They were expecting to provide oral comments.

VICE CHAIR BERG: Thank you. I'll have Ms. Peter address that.

Written comments, they can submit it to the clerk right now, and it will be in the Board. Since this is continuing to the next Board meeting, which is either December or 12th or 13th. We have a two-day Board meeting, those people can testify at that point. We're not closing the record.

VICE CHAIR BERG: Okay.

MR. FERNANDEZ: Okay. Thank you.

Okay. Thank you, everyone. My name is Ignacio Fernandez. And on behalf of Southern California Edison, I'm happy to provide comments for the Electrify America Cycle 2 plan.

First of all, as you well know, Southern

California Edison strongly supports California's

leadership in adopting progressive policies to improve air

quality, fight climate change and transition to a cleaner

transportation future, such as California point of

purchase rebate program funded for Low Carbon Fuel Standard.

But we all know that time is of the essence. And to meet our State environmental policy goals, we need a -for instance, to put five million electric vehicles on the street by 2030. That's an ambitious task. And this is why Southern California Edison vision and contribution is reflected on both our chart -- charge-ready programs, which when combined will fund charging infrastructure for medium- and heavy-duty fleets, and electric vehicles fueling infrastructure to support 48,000 new charging ports, along with marketing, education and outreach to accelerate the market penetration of EVs in our territory.

If approved, our Charge Ready 2 program, \$760 million, application will become a third of California's projected incremental market needed during the full extent of the program. But despite this tremendous effort, there's still -- there's still a great need for awareness and advancement in infrastructure. And this is why we at Southern California Edison very much welcome and commend the continued efforts of Electrify America, which is -- I think my time was --

VICE CHAIR BERG: Please go ahead with your closing comments.

MR. FERNANDEZ: Sure -- which is a great

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1
    compliment for our work in DC fast-charging
    infrastructure, and a greater education and outreach
 2
 3
    focused on bringing transportation electrification
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    programs, especially for disadvantaged communities.
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             VICE CHAIR BERG: Thank you so much.
                                                    So we'll
6
    have you turn in your testimony and we really appreciate
7
    that.
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             MR. FERNANDEZ: Great.
                                     Thank you.
9
             VICE CHAIR BERG:
                               Thank you.
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             CHIEF COUNSEL PETER: Ms. Vice Chair, I misspoke.
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    The December meeting is Thursday Friday, December 13th and
12
    14th.
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             VICE CHAIR BERG:
                               Thank you.
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             Mr. Hernandez, you were here all day.
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             MR. HERNANDEZ: I know. I've been up since like
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    2:30.
17
             VICE CHAIR BERG: Oh, you beat me. I didn't get
18
   up till 3:30.
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             (Laughter.)
20
             MR. HERNANDEZ: Yeah. So I'll try to keep this
    under two minutes, because I do have a 6:25 bus to catch.
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22
             Leadership Counsel has been engaged since Cycle
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    1, primarily because the bias of Electrify America's
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    investment plan has disproportionately favored metro large
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areas. We had to fight tooth and nail to get the Fresno

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metro area added into the first cycle. And furthermore, it is my firm belief that this \$2 million rural allocation should have been part of Cycle 1.

I think the small amount that that's allocated further delays ZEV adoption in communities that have the worst air quality, and are the most infrastructure deficient speaking of the previous infrastructure gap of 2025 and 2030.

And so I think this is an opportunity to direct funds specifically to communities that are already discriminated against by, you know, investors that, you know, see large metro areas as primary sites for electrification.

Furthermore, I think the renewable energy portfolio should be exclusively 100 percent focused on disadvantaged communities, in order to lower the costs associated with generation, as well as facilitate more localized air quality benefits.

Furthermore, I think it's very feasible, given the slide earlier about what the investment percentages are for disadvantaged communities to insist that the 35 percent target is at least a target, but not the goal. It's very -- it's possible to at least do 50 percent in disadvantaged communities through every investment program.

Furthermore, I think it's insult to low-income communities to have more allocations for autonomous vehicles that displace labor, rather than actual human beings in need of clean vehicles.

Thank you.

VICE CHAIR BERG: Thank you.

Thank you, Anne, for hanging out with us.

MR. SMART: Thanks for having me.

We appreciate the time to talk today. I'm at ChargePoint. We're a manufacturer of charging stations here in California. As we shared in written comments, we've experienced our customers, both current and potential customers, being offered above-market payments from Electrify America to halt work with us.

I recognize that there were promises made in Giovanni's presentation about not installing on CEC sites. But that doesn't get to the core issue we have, which is the above-market payments and the communication to site host on this issue.

We'd like to thank the California Energy

Commission for diligently investing our concerns over the past eight months. It's been very challenging, because you can imagine that the nervousness of small business owners in rural parts of the states who engage with government entities, particularly when there's legal

language in their site bids asking them not to.

We hope to have the same opportunity to engage with CARB. We have not had any opportunity. There has been no stakeholder meeting. I learned a few hours ago which staff member is actually leading this process. We hope that over the next few weeks there is more transparency about where to present our concerns.

We have a few suggestions. We hope that CARB will assign someone to work with stakeholders, present us a transparent process to submit comments and concerns between cycles. I have a large policy team, but I can imagine that many of my competitors don't, and are site hosting installers doesn't.

It would be helpful to have a place on the website to submit this clearly. Please take a closer look at the site acquisition costs that Electrify America is claiming and reporting. And please consider placing a three-month limit on the amount of time that Electrify America can contract with a site without initialing installation of a station.

I recognize that there are permitting challenges in some parts of the state, but we have not experienced all of the same permitting challenges being reported, and believe that that three-month window makes sense.

And lastly, please consider aligning future

cycles with investment plans from State agencies. We would appreciate more coordination between CEC and CPUC on their sites.

Thank you for your time.

VICE CHAIR BERG: Thank you very much.

Good evening, Josh.

2.4

MR. COHEN: Good evening. My name is John Cohen. I'm with SemaConnect. We're a national manufacturer of smart networked electric vehicle charging stations. Thank you to the Board. Thank you to the staff for sticking with us all day.

I submitted written comments earlier. I'd just like to offer two brief comments during this oral testimony. The first is that SemaConnect strongly supports the Electrify America plan as a way to incentivize private sector competition and investment. Electrify America is going to be spending hundreds of million of dollars of private dollars debt, support private companies like SemaConnect, which compete privately for RFPs, and contract negotiations, and support manufacturing and jobs all within a public sector framework of legislative and CARB oversight to support public goals.

It's really a national model. And like I said, it supports private sector dollars, private sector

investment, and private sector competition. The second point is as much a clarification. One of the letters the Board received was from EVCA, Electric Vehicle Charging Association, of which SemaConnect is a member. I have a lot of respect and appreciation for the work that EVCA does.

And my colleagues throughout the industry who work with EVCA on a number of issues where the interests of the charging industry align. But on this issue of the role of Electrify America, and public utilities more broadly, larger actors, there's a fundamental disagreement among some of the companies within the industry.

SemaConnect strongly supports the role of Electrify America, public utilities and others as part of an all-hands-on-deck approach to advance the pace of vehicle electrification.

Thank you for your attention. I'll be happy to answer any questions either this evening or afterwards.

VICE CHAIR BERG: Thank you very much.

Good evening, Jessica.

MS. MELTON: Hi. How are you? Vice Chair Berg, members of the Board, good evening. Jessica Melton on behalf of Pacific Gas and Electric Company. PG&E supports the Electrify America Cycle 2 investment plan's focus on ZEV-fueling infrastructure and brand-neutral education,

awareness, and marketing.

These proposed activities will lead to the development of additional and much needed electric vehicle charging infrastructure across the state, and it will improve public awareness of ZEV options.

It will also -- it is also important that these investments will benefit low income and/or disadvantaged communities, as Electrify America will strive to ensure that 35 percent of its investments are in those areas.

Throughout Cycle 1, PG&E has worked closely with Electrify America to provide electrical service to EV charging sites being developed within PG&E's service area. We look forward to continuing to work with Electrify America as they deploy their Cycle 2 investments and support adoption of this plan.

Thank you for your time.

VICE CHAIR BERG: Thank you.

Is Bud still with us?

And -- oh.

MR. BEEBE: Yeah. Fortunately, we're all still up a little bit anyway, even if we have lack of sleep.

Hey. So I'm Bud Beebe. I'm with the California Hydrogen Business Council. And the CHBC works well with staff and the Board on many issues. And we are very happy to be in a good position in that way.

I'm going to speak today about resiliency and the symbiosis that multiple technologies bring to issues that need our resolution in society. Back when the State of California was considering large-scale investment in renewable energy, there was a lot of effort -- remember, in the 1990's and early 20s that consulting firms, and certainly the wind industry, said don't waste your money on solar, because wind is the obvious single opportunity for us.

Fortunately, we said no. There seems to be something in solar that's also important. And today, we have a much more robust answer to renewable energy as a result, right?

Okay. So the consent decree is quite clear in saying that money in these Electrify America programs can be spent on infrastructure that is for charging, and is for fueling. It's odd to me that in the staff's assessment summary they say that there's \$153 million in fueling infrastructure in these programs, when, in fact, there is no dollars in fueling, but all of it goes to charging.

Hey, our -- we're -- we are glad to be partners in the electric vehicle zero-emission technology future, but it has to be a much broader thing.

Let me ask -- let me close by asking you a

question. Your hand-held device. When did your hand-held device go from becoming a simple cell phone to being a smartphone? When did that happen?

It happened when we were no longer tied to only cell phone towers. Smartphones became smart when we could access the internet through WiFi or access the internet or telecommunications through cell phone towers. That single piece of bringing those two symbiotic great technologies together gave us the smartphone.

I ask you, why aren't we being smart with electric vehicle future by including the fuel cell electric vehicle refueling infrastructure.

Let me just also ask why staff and Board was not at least a bit incensed that the EA plan on page 22 completely dismisses as de minimis, dismisses as de minimis the advice from eight government agencies including your own.

Look at that part. It says, hey, there were eight agencies that wanted to include fuel cell infrastructure in this thing. And yet, well we're not just going to -- we just won't do that. We're open to it. Oh, sure, we're open to it, but we didn't do anything with it.

So thank you very much for you time.

VICE CHAIR BERG: Okay. Thank you for bringing

that.

MR. LEVY: Thank you, Vice Chair Berg, Board
Members, staff for the opportunity to comment and for all
of your leadership in advancing ZEV adoption across
California. I'm Jonathan Levy. I'm here representing
EVgo, the nation's larges public network of fast chargers
for electric vehicles. I'll try and be brief. I also
have a flight to catch.

The last time that CARB convened a public hearing to evaluate a cycle approval, I was there in Riverside, and EVgo was one of many industry partners expressing strong support for the deployment of significant funding in California and across the country, particularly for highway charging as part of Cycle 1.

And EVgo continues to believe that the Volkswagen settlement funds can be extremely valuable and it can have rising tide impact that lifts all boats to benefit all Californians.

However, we have serious concerns with how Cycle is currently proposed and respectfully requests that the Board work with Electrify America to amend their plan, to refocus on corridor charging, invest far more than one percent of Cycle 2 in rural California, and ensure that the investments will complement and not hinder other efforts to install electric vehicle charging. We also

believe that there's room for additional oversight from ARB.

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Without modification, we are concerned that there will be negative impacts on a growing market that could have adverse outcomes and impacts on consumers and limit additional EV charging deployments.

EVgo is a board member of Veloz and a leader of the industry does indeed believe in electric for all, and that a rising tide can lift all those boats. But we're worried about how implementation of Cycle 1 has had unintended consequences and what that means going forward in Cycle 2.

There have been a lot of proposed locations at existing properties, sometimes directly next to existing charging stations, which can undermine the utilization there, as well as minimize the exposure to new audiences that need to see a diverse and scattered group of investments in charging stations.

And as was mentioned previously, we are also concerned about above-market rates for rent that can limit the infrastructure built, both by public and private dollars. And we believe that more transparency and more oversight can help with that.

We're also very concerned that by focusing Cycle 2 so much on cities, that rural California could be left

behind. As has been noted, two million of the \$200 million inn Cycle 2 is for rural L2 installations. And we think one percent is very low for what these communities need, particularly when we start thinking about timing.

If look at when Cycle 2 will be -- Cycle 3 rather, would be proposed, improved, and then into development, you're probably talking about 2023, 2024 before the infrastructure would be available in those communities.

So look forward to continuing the conversation.

Happy to be a resource and continue to engage with staff.

VICE CHAIR BERG: And again, thank you for

staying so late.

MR. LEVY: My pleasure.

VICE CHAIR BERG: Is David still with us?

Tom Knox.

MR. KNOX: Vice Chair and members, thank you for the opportunity to comment. I'm Tom NOx of Valley Clean Air Now. We're in strong support of the Cycle 2 plan.

I wanted to focus my comments tonight on the Cycle 1 process. We've seen first hand how this team has really worked with stakeholders throughout the state to understand the unique concerns in California around EVs in disadvantaged communities. They've shown a willingness to adapt their plans.

You know, they have been a wonderful stakeholder to work with. And then we were selected to operate the outreach program in San Joaquin Valley. In the six weeks that we've been up and running, we've been able to double our customer pipeline. Thanks to their flexibility and their willingness to work with us. It took us ten days between being informed and actually being in contract and working. It's been the best thing to ever happen to our program. So we're incredibly happy about that.

And they've been a real pleasure to work with. We believe this team can be trusted to put together a great plan, and then to implement it very well.

So thank you very much.

VICE CHAIR BERG: Thank you.

Good evening, David.

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MR. SILBERFARB: Hi. I'm Dave Silberfarb from BTC Power. We are a small business that specializes in the manufacture of electric vehicle charging stations. Our offices -- excuse me. Our offices are located in a disadvantaged economic zone in Santa Ana, California.

I'm here today to offer personally and on behalf of my company our full and complete support for Electrify America's Cycle 2 plan.

While my notes had me urging you to approve this plan today, I do understand the quorum issue, but I do

urge the Board to approve this plan as soon as possible.

Little more about us. BTC is fortunate to be a supplier to Electrify America for the chargers needed for the Cycle 1 plan. And this has had many good effects for our company. We've been able to expand our operations and have hired six additional full-time employees in Santa Ana, and four other employees and four other employees throughout the U.S.

Additionally, due to the awareness about the ultra high-powered charging stations that Electrify

America is putting in in their network, we've seen other customers expressing interest in this type of hardware, and have been ordering more of this product for us.

From our viewpoint, the Cycle 1 investment has helped to encourage others to invest in the ultrafast charging space, and we feel Cycle 2 will continue to do the same.

Again, I urge you to please approve this plan as soon as possible.

Thank you.

VICE CHAIR BERG: Thank you.

MR. MAGAVERN: Vice Chair Berg and Board members, Bill Magavern with the Coalition for Clean Air in support of the Cycle 2 plan. We appreciate Electrify America's data-driven approach and also their responsiveness to our

input, and the input of other groups that they've met with around the state. And we're particularly enthusiastic about some elements of the plan, including the continued outreach to disadvantaged communities throughout community based organizations, the emphasis on rural charging and metro area fast-charging. Also, the aid for home charging for low-income drivers, and the potential support for electric transit buses, and also increased renewable energy.

Thanks.

VICE CHAIR BERG: Thank you, and thanks again for staying.

Mr. Gant

MR. GANT: Good evening, Madam Vice Chair and Board. My name is Simeon Gant, and I'm the executive director and founder of Green Technical Education and Employment. It is a community based nonprofit here in Sacramento. And what we do is we train and prepare high school and college students for career opportunities in clean energy, energy efficiency, and sustainable living strategies.

We are here in support of Electrify America's Cycle 2 process. We really appreciate the fact that they are looking into low-income and disadvantaged communities to provide the resources. We do train our youth and talk

to them daily about transportation careers. And we let them know that 21st century transportation careers are electric. And we talk to them about clean energy and solar. And we let them know that the -- there are many opportunities out there. And Electrify America is bringing those opportunities to our community, specifically in Del Paso Heights, as well as Oak Park, where my supervisor also supports our efforts. And so we just want to thank Electrify America and support Cycle 2.

VICE CHAIR BERG: Thank you very much.

Last speaker, Mr. Ashley.

MR. ASHLEY: Good evening, Vice Chair Berg and remaining members of the Board. I'm Thomas Ashley. I'm vice president of policy for Greenlots. Greenlots is a leading EV charging software and services firm based in Los Angeles. Greenlots strongly supports Electrify America's Cycle 2 California investment plan and urges the Board to approve the plan at it's earliest ability in December.

Electrify America's investment has already had a positive impact on electric vehicle adoption, and the growth of the electric vehicle charging products and services market.

Many companies have directed -- directly benefited from Electrify America's procurement of products

and services from around the market. Those, or these, and other companies have benefited from indirect sales opportunities spurred by the development of Electrify America's National Corridor Network of DC fast chargers, and the level of attention and evolving arranged confidence associated with it.

Electrify America's investment is coming at a time when the market for both vehicles and charging products and services needs motivated capital, as the lack of private market business model for owning and operating charging stations continues to significantly limit private investment.

While significant investment is occurring in California, including through a combination of ratepayer funded utility program, Energy Commission programs, and indeed Electrify America's Cycle 1 investment, much more is needed.

Indeed, while Electrify America's Cycle 1 investment has had a positive effect on the growth of the market, we're still far removed from a healthy robust EV charging products and services market that is able to facilitate the depth and acceleration of EV adoption necessary to meet California's climate and air quality goals.

Companies like ours have added good paying jobs

for Californians to support direct business with Electrify America and continued market growth. That trend will only accelerate with the Cycle 2 investment.

Let me just close by saying that Electrify

America's Cycle 2 ZEV investment plan will positively

support investment in businesses, workers, and communities

across California. And Greenlots and our employees

strongly support approval of the plan.

Thank you.

VICE CHAIR BERG: Thank you very much.

Well, that is the end of our witness list. And if I understand Ms. Peter correctly, we will not be closing the record today?

CHIEF COUNSEL PETER: Actually, I think you could close it for today, and then we'll reopen it at the next meeting, just to make it clear that people aren't going to be sending stuff in in the interim.

VICE CHAIR BERG: Okay. Thank you.

So I will close the record for today. We will take up this item again on either December 14th or 15th.

EXECUTIVE OFFICER COREY: Thirteenth or 14th.

VICE CHAIR BERG: Thirteenth or 14th.

EXECUTIVE OFFICER COREY: The agenda will be posted ten days prior to the meeting. We need to work out the logistics. But it will be a two-day Board hearing,

December 13th and 14th. We'll get an agenda out in advance.

VICE CHAIR BERG: And at that time, we'll reopen the record and proceed on the item.

But before we leave tonight, we would like to hear from the Board members that would --

BOARD MEMBER FLOREZ: I'd just say I would just encourage the -- if we could, look at the resolution that we passed, make a proactive effort to pull in the stakeholders, have the stakeholder meeting, if we can, and not use the comments as some indicative indicator that we don't need to do that. We do that -- we have tons of stakeholder meetings here -- around here all the time. Just wonder if we can do that before we come back in December, or I'll have the same concern. So I'm just asking if we can do that, it would be great.

VICE CHAIR BERG: Okay. Thank you.

Any questions -- any comments, I'm sorry?

BOARD MEMBER SHERRIFFS: Thank you. Thanks to everyone for staying late. Wow.

Back to the hydrogen question. You know, I guess -- so the report from Electrify America remaining open to economically sustainable investment opportunities. I'm wondering how you balance, because on the face of it the rural investments would not be as economically

sustainable, and so how that is -- gets prioritized, how we decide to make an investment in an area that is likely to be less profitable in the long run. And I worry that -- well, I guess my question is what -- the Board is going to need to do other things to support hydrogen infrastructure, if we're not supporting it here, unless we've already made a decision which fuel we're choosing, which I don't think we want to do all.

VICE CHAIR BERG: No.

BOARD MEMBER SHERRIFFS: So I think we need to understand better what are the major barriers that -- to the economically sustainable opportunities for hydrogen at this point.

MR. PALAZZO: So, Chair, thanks for the question, and also I would like to thank Dr. Beebe, if he's here.

Hi.

So, first of all, Electrify America and myself, we do not have anything against hydrogen. Actually, if you Google on the internet, you find vides of myself driving hydrogen cars in 2007, 2006. At that time, actually, it seems, and I had the impression, hydrogen could really show the way of electric mobility. You had longer range. Charging times were really nothing. And I believed it would have been a great option for both passenger cars and heavy-duty.

You know, long-range batt reached the market in the years. As you have seen Tesla shown this, not only on the passenger car side, but also let's say on the truck side that with large batteries, capacity that can reach much higher, let's say, range.

And if you look at our network, Electrify America is deploying 350 kilowatts able to charge an EV 20 miles per minute. So what we did actually was the following:

First of all, we had 800 submission to our outreach activity here in California initially, I would say. Seventeen of them related to hydrogen, eight of them came directly from hydrogen focusing groups or company making business into the hydrogen.

So what we did, we looked a lot towards a concrete investment opportunity. We want to follow up in Cycle 2. And we requested grants. That's what we got. And as you know, grants does not fit exactly, let's say, with the mission and the sustainability of the investment in Electrify America.

So during the outreach, and especially after October the 3rd, we received new, let's say, proposal to discuss. And we are discussing this proposal right now.

So if I tell you that you Professor Sherriffs or also the industry will bring an investment opportunity to Electrify America, which is viable, which we can discuss

together, I have nothing against discussing this opportunity together and potentially implement it. So the point is that if you give us the chance to look into an investment plan together, we can make it happen. At this point of time, we did not receive anything workable up to now.

VICE CHAIR BERG: A follow up question?

No. Okay. Thank you very much.

CHIEF COUNSEL PETER: I'm sorry, Vice Chair Berg. Can I clarify something?

VICE CHAIR BERG: Yes.

CHIEF COUNSEL PETER: So I -- when I was saying that we should close the record, I meant in terms of new public members coming down and adding themselves to the list. I think we've finished with the public comment.

VICE CHAIR BERG: That's correct.

CHIEF COUNSEL PETER: What's happening right now the questions from Senator Florez, and Dr. Sherriffs, and responses, all that is in the record. The court reporter is taking it all down. So what we'll do is at the end of the meeting that will be the end of the testimony, all of that is in the record. What I wanted not to also happen is people starting to send letters in between now and the Board meeting.

They can send -- they can bring them to the Board

meeting. They can testify at the next Board meeting, but I didn't want to have an open-ended comment period.

VICE CHAIR BERG: Four week period.

CHIEF COUNSEL PETER: We've already had our comment period. We're not in a regulatory mode, so we don't have 15 day notices. So just to clarify, so everything that happens today on this item till the conclusion of the meeting is part of the record. And then this -- I believe there will be a stakeholder meeting. And that obviously can be reported as to what happens from that at the December Board meeting. There will be a public hearing. Anybody that wants to testify verbally or turn in Written comments at the meeting, that would all be part of the record as well.

VICE CHAIR BERG: Great. Thank you very much for that clarification.

Supervisor Serna.

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BOARD MEMBER SERNA: Thank you -- so to dovetail on what Ms. Peter just mentioned, nothing in our closing of the record for public speakers is keeping us, for instance, my colleague Mr. Florez, from requesting perhaps some adjustment to the resolution or about what I'm going to suggest in that same spirit, we can still do that.

CHIEF COUNSEL PETER: (Nods head.)

BOARD MEMBER SERNA: So along those lines, I

would to -- first of like, I'd like to thank Mr. Gant -- Simeon Gant, who we heard from briefly with Greentech, who does some incredible work with youth here in the Sacramento region. Really doing hands-on education when it comes to cutting edge technology, education in the space electric mobility.

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I think that we ought to -- since we're going to have some time, I think we ought to think about how we maybe memorialize that in a resolution, in terms of general interest in investment in the sustainable education of kind of the trades that come along with electric mobility.

Because every time a new charger goes in, we're going to have to have a larger workforce obviously that knows how to service those -- that charging infrastructure. So I think that's worth considering.

CHIEF COUNSEL PETER: So -- Supervisor Serna, so what -- you're just giving -- since we don't have a quorum, we can't pass a resolution.

BOARD MEMBER SERNA: Sure.

CHIEF COUNSEL PETER: You're giving direction to the staff, which the Board does all the time. And I'm sure that's how they will treat that.

BOARD MEMBER SERNA: Great. Thank you.

VICE CHAIR BERG: Thank you.

Any other questions?

Yes. Comments.

BOARD MEMBER SPERLING: Just a few short comments. And, you know, I want to note that everyone always wants more money, whether for rural, for hydrogen. I mean, hydrogen -- as an example, I've driven a hydrogen car for three years. Strong -- done everything I can to help it. But, you know, there's finite money. You know, there's priorities for different kinds of funding, different kinds of programs.

We need to -- you know, this is a process that's been scrutinized by many. It's gone through lots of meetings, lots of scrutiny. We can always do it differently. There's -- can -- always changes can be made. You can always second guess. You can always criticize.

Those that don't get the money, they're going to criticize, because they didn't get the money. Those that got the money are happy and praise the process.

So I would just kind of just make the observation is that I'm disappointed we're not able to vote and close up this process. But I think it's been a real -- it's been a good process, and you can always make changes. There's no right or wrong really in this case. I think there's been a lot of effort to get it done. You know, to

meet a lot of the different goals and concerns, and do it as well as possible.

So I just want to add those thoughts. And I guess we're going to say the same thing again in a month, is that basically what -- what's happening?

VICE CHAIR BERG: Well, actually, I'm kind of hoping that we'll be able to bring in some new thoughts and maybe short summaries, so that we'll be able to have this particular item go through quicker, because our December agenda is very, very full, and we'll be having eggnog here friday evening.

MR. PALAZZO: I'm going to be there, if you need me.

VICE CHAIR BERG: Another comment, Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: Well, just Supervisor

Gioia's question to staff I think about what we can do to help make a more uniform permitting process, a faster permitting process, whether it's for hydrogen or for charging stations to help speed the process along.

DEPUTY EXECUTIVE OFFICER CLIFF: This is Steve Cliff. I suggest that we follow up with Supervisor Gioia offline, and we'll have -- we'll bring in our colleagues at the Governor's Office of Business and Economic Development. And then we can provide a report following up at the next hearing.

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             VICE CHAIR BERG: That will be great.
             Have we done it?
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             Thank you -- thank you very much, sir, for
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    staying. We also need you back in December, so we'll look
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    forward to seeing you back in December.
             Thank you, Board members.
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             Do we have any public comment?
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             BOAR CLERK DAVIS: (Shakes head.)
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             VICE CHAIR BERG: Hallelujah.
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             (Laughter.)
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             VICE CHAIR BERG: And -- Okay. So December Board
   meeting is 13th and the 14th. We didn't know it was going
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    to be a -- oh, it's the 14th and 15th? I just looked it
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    up.
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             EXECUTIVE OFFICER COREY: No, no. Thirteenth and
16
    14th.
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             CHIEF COUNSEL BERG: It's been a long day.
18
             VICE CHAIR BERG: That's okay. I get it.
19
    It's -- no problem. Thirteenth and 14th, Thursday and
20
    Friday, second week in December. Definitely a two-day
21
    meeting. Please put it on your calendar, and stay
22
   healthy, because we all need to be here, and have a
23
    wonderful, wonderful Thanksgiving everyone.
2.4
             And we'll see next month.
25
             Meeting closed.
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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 1st day of December, 2018.
15	
16	
17	
18	
19	Anna M
20	Julius 3 Maria
21	
22	JAMES F. PETERS, CSR
23	Certified Shorthand Reporter
24	License No. 10063

25