

**The CARB AB 617 Consultation Group discussed the draft Roadmap to Reduce Air Toxics at their Study Session on 9/14/26. Below is the transcript from that Study Session to be considered as part of public comment.**

13:02:03 --> 13:02:16

Sarah Sullivant | CARB (she/her): Well, welcome, everyone. Thank you for joining us for this study session today. I appreciate everyone taking the time out. I'm going to go over some housekeeping and meeting logistics before we dive into our topics.

13:02:17 --> 13:02:19

Sarah Sullivant | CARB (she/her): Next slide, please.

13:02:23 --> 13:02:26

Sarah Sullivant | CARB (she/her): We'll go one more slide.

13:02:26 --> 13:02:27

Sarah Sullivant | CARB (she/her): Thank you.

13:02:27 --> 13:02:42

Sarah Sullivant | CARB (she/her): For Consultation Group members and panelists, please turn on your cameras if possible. It's great to see who's here and who's speaking. And please be sure to mute your microphone when you are not speaking so we can limit interruptions and background noise.

13:02:42 --> 13:02:59

Sarah Sullivant | CARB (she/her): You can raise your virtual hand if you'd like to make a comment or ask a question. There's a couple of different ways to do this. You might have to click on the React button in order to click on Raise Hand, or you might just see the Raise Hand button on your screen.

13:03:00 --> 13:03:21

Sarah Sullivant | CARB (she/her): In response to public comments and based on Bagley-Keene rules, we are not utilizing the chat or Q&A functions for this meeting. We acknowledge that we've previously shared links in the chat for convenience, but since this isn't available, please refer to the meeting materials posted on the website for relevant links and resources today.

13:03:23 --> 13:03:25

Sarah Sullivant | CARB (she/her): Next slide, please.

13:03:28 --> 13:03:40

Sarah Sullivant | CARB (she/her): For public participants, we will have a public comment portion of this meeting where members of the public will be able to raise their hands in Zoom to speak. When it's your turn, the host will ask you to unmute.

13:03:40 --> 13:03:49

Sarah Sullivant | CARB (she/her): We intend to give each public commenter three minutes to speak, and we'll let you know if any changes are required based on the volume of comments.

13:03:49 --> 13:03:51

Sarah Sullivant | CARB (she/her): Next slide, please.

13:03:54 --> 13:04:08

Sarah Sullivant | CARB (she/her): If for any reason you require any technical Zoom support today in the meeting, please contact Adrianna Hernandez by email or phone as provided on this slide and we will do our best to assist you.

13:04:08 --> 13:04:22

Sarah Sullivant | CARB (she/her): As a quick reminder, today's meeting is being recorded. CARB staff will post the recording to the Consultation Group Meetings and Events website in the coming weeks. And this is the same website where you can find all of the materials for today's meeting.

13:04:23 --> 13:04:28

Sarah Sullivant | CARB (she/her): For Consultation Group members, we'll be promoting you to panelists.

13:04:28 --> 13:04:35

Sarah Sullivant | CARB (she/her): So we'll be on the lookout to make sure that all of the permissions are correct for that.

13:04:39 --> 13:04:44

Sarah Sullivant | CARB (she/her): CARB folks, anything to add before I move on to roll call? Anything that I missed?

13:04:44 --> 13:04:49

Deldi Reyes, CARB: Sarah, this is Deldi. Thank you for that introduction. And just a gentle reminder,

13:04:49 --> 13:05:04

Deldi Reyes, CARB: to follow what Sarah just said, Consultation Group members who are here as primary will be panelists. Everyone else who is an alternate for a Consultation Group member who's not acting for their primary will be moved to attendee format. Of course, you can still hear, and observe everything that's happening, but we do need to abide by the Bagley-Keene requirement, which is one organization, one representative.

13:05:20 --> 13:05:22

Sarah Sullivant | CARB (she/her): Thank you, Deldi.

13:05:24 --> 13:05:27

Sarah Sullivant | CARB (she/her): Anything else before we move on to roll call?

13:05:32 --> 13:05:34

Sarah Sullivant | CARB (she/her): All right.

13:05:34 --> 13:05:36

Sarah Sullivant | CARB (she/her): Next slide, please.

13:05:37 --> 13:05:40

Sarah Sullivant | CARB (she/her): And we'll go one more slide.

13:05:40 --> 13:05:47

Sarah Sullivant | CARB (she/her): So this is a slide with all of the members listed. Items in red are updates since the last full group meeting.

13:05:47 --> 13:05:56

Sarah Sullivant | CARB (she/her): When I say your name, if you'll please indicate if you're present online and share one word on how you're feeling as we begin the meeting.

13:05:57 --> 13:06:00

Sarah Sullivant | CARB (she/her): Pull up my list here.

13:06:01 --> 13:06:14

Sarah Sullivant | CARB (she/her): Alright, and please do bear with me as I pronounce names. Please correct me if I'm incorrect. Super helpful. and I'll start at the top here. So, Dr. Alberto Ayala.

13:06:17 --> 13:06:19

Sarah Sullivant | CARB (she/her): Janice Lam Snyder.

13:06:19 --> 13:06:23

Janice Lam Snyder: here, and I am rested.

13:06:24 --> 13:06:26

Sarah Sullivant | CARB (she/her): Thank you.

13:06:31 --> 13:06:33

Sarah Sullivant | CARB (she/her): Sorry, my...

13:06:33 --> 13:06:36

Sarah Sullivant | CARB (she/her): My file was doing weird things.

13:06:36 --> 13:06:38

Sarah Sullivant | CARB (she/her): Bishop Chris Baker.

13:06:38 --> 13:06:40

Bishop Chris Baker: Here and feeling good.

13:06:41 --> 13:06:42

Sarah Sullivant | CARB (she/her): Great.

13:06:43 --> 13:06:45

Sarah Sullivant | CARB (she/her): Dr. John Balmes.

13:06:46 --> 13:06:49

CG Co Chair-John Balmes: Present and feeling great.

13:06:49 --> 13:06:51

Sarah Sullivant | CARB (she/her): Fantastic.

13:06:51 --> 13:06:53

Sarah Sullivant | CARB (she/her): Jasmine Beltran.

13:06:55 --> 13:06:59

CG-Jasmine Beltran: I'm here and I'm feeling great and excited.

13:06:59 --> 13:07:01

Sarah Sullivant | CARB (she/her): Awesome.

13:07:01 --> 13:07:03

Sarah Sullivant | CARB (she/her): Dr. Y-Anad Burrell.

13:07:07 --> 13:07:09

Y'Anad Burrell: Here, feeling good. Thanks.

13:07:10 --> 13:07:12

Sarah Sullivant | CARB (she/her): Tim Carmichael.

13:07:15 --> 13:07:20

CG-Tim Carmichael: Present, and I'm hoarse because I was at a volleyball tournament this weekend.

13:07:20 --> 13:07:22

Sarah Sullivant | CARB (she/her): Well, I hope that was fun.

13:07:23 --> 13:07:26

Sarah Sullivant | CARB (she/her): Prithvi Deore.

13:07:30 --> 13:07:32

Sarah Sullivant | CARB (she/her): Do we have Scott Strelecki?

13:07:36 --> 13:07:39

Sarah Sullivant | CARB (she/her): All right. Natasha Dulik.

13:07:44 --> 13:07:48

Sarah Sullivant | CARB (she/her): Kirsten or Kirsten Uchitel.

13:07:49 --> 13:07:51

Kirsten Uchitel: Yes, here.

13:07:51 --> 13:07:55

Sarah Sullivant | CARB (she/her): Thank you. Could you correct me on the pronunciation of your name?

13:07:54 --> 13:07:58

Kirsten Uchitel: Uchitel. You were correct. Yeah.

13:07:55 --> 13:07:57

Sarah Sullivant | CARB (she/her): Uchitel.

13:07:57 --> 13:07:58

Sarah Sullivant | CARB (she/her): And your first name?

13:07:58 --> 13:08:00

Kirsten Uchitel: Kirsten?

13:07:59 --> 13:08:01  
Sarah Sullivant | CARB (she/her): Kirsten, perfect. Thank you so much.

13:08:01 --> 13:08:02  
Kirsten Uchitel: Sure.

13:08:03 --> 13:08:05  
Sarah Sullivant | CARB (she/her): Mary Elizabeth.

13:08:10 --> 13:08:12  
Sarah Sullivant | CARB (she/her): Kevin Hamilton.

13:08:14 --> 13:08:15  
CG - Kevin D Hamilton, RRT,ACS: Yes.

13:08:17 --> 13:08:19  
Sarah Sullivant | CARB (she/her): Ryan Hayashi.

13:08:24 --> 13:08:26  
Sarah Sullivant | CARB (she/her): Stephanie Ng.

13:08:30 --> 13:08:33  
Sarah Sullivant | CARB (she/her): Dr. Anissa Heard-Johnson.

13:08:38 --> 13:08:40  
Sarah Sullivant | CARB (she/her): Walter Shen.

13:08:44 --> 13:08:47  
Sarah Sullivant | CARB (she/her): Belen Leon Lopez.

13:08:47 --> 13:08:50  
CG-Belen Leon Lopez: Here and feeling fresh. Thank you.

13:08:50 --> 13:08:51  
Sarah Sullivant | CARB (she/her): Great.

13:08:53 --> 13:08:55  
Sarah Sullivant | CARB (she/her): Dr. David Lo.

13:08:57 --> 13:09:01  
David Lo: I'm here. I'm vaccinated and my arms are sore, so.

13:09:01 --> 13:09:04  
Sarah Sullivant | CARB (she/her): Hopefully that passes quickly.

13:09:04 --> 13:09:05  
David Lo: Hopefully.

13:09:05 --> 13:09:08  
Sarah Sullivant | CARB (she/her): Dr. Jonathan London.

13:09:12 --> 13:09:15  
Sarah Sullivant | CARB (she/her): Dr. Charisma Acey.

13:09:20 --> 13:09:22  
Sarah Sullivant | CARB (she/her): Cassie Lopina.

13:09:24 --> 13:09:26  
CG-Cassie Lopina: Here and under caffeinated.

13:09:27 --> 13:09:28  
Sarah Sullivant | CARB (she/her): Fair.

13:09:29 --> 13:09:31  
Sarah Sullivant | CARB (she/her): Arsenio Mataka.

13:09:31 --> 13:09:33  
CG-Arsenio Mataka: Here, ready.

13:09:34 --> 13:09:35  
Sarah Sullivant | CARB (she/her): Great.

13:09:36 --> 13:09:37  
Sarah Sullivant | CARB (she/her): Baldwin Moy.

13:09:38 --> 13:09:40  
CG-Baldwin Moy: Here, rested.

13:09:41 --> 13:09:43  
Sarah Sullivant | CARB (she/her): Great.

13:09:43 --> 13:09:45  
Sarah Sullivant | CARB (she/her): Dirk Piersma.

13:09:50 --> 13:09:52  
Sarah Sullivant | CARB (she/her): Maximilian Rosa.

13:09:57 --> 13:09:59  
Sarah Sullivant | CARB (she/her): Dr. Rebecca Skinner.

13:09:59 --> 13:10:01  
CG - Rebecca E Skinner: I'm present. Thank you.

13:10:02 --> 13:10:05  
Sarah Sullivant | CARB (she/her): Diane Takvorian.

13:10:07 --> 13:10:12  
CG Co Chair-Diane Takvorian: It's finally cooler, so makes me happy.

13:10:11 --> 13:10:13  
Sarah Sullivant | CARB (she/her): Great.

13:10:13 --> 13:10:16  
Sarah Sullivant | CARB (she/her): Paula Torrado Plazas.

13:10:17 --> 13:10:19  
CG - Paula Torrado, OEHHHA: Here, presente.

13:10:20 --> 13:10:22

Sarah Sullivant | CARB (she/her): Nice to have you.

13:10:22 --> 13:10:24

Sarah Sullivant | CARB (she/her): Mary Valdemar.

13:10:29 --> 13:10:33

Sarah Sullivant | CARB (she/her): Thought I heard a sound. Just want to make sure. Mary Valdemar?

13:10:35 --> 13:10:38

Sarah Sullivant | CARB (she/her): Okay. Domingo Vigil.

13:10:39 --> 13:10:42

Domingo Vigil: Present and feeling calm. Thank you.

13:10:42 --> 13:10:43

Sarah Sullivant | CARB (she/her): Great.

13:10:43 --> 13:10:46

Sarah Sullivant | CARB (she/her): Christine Zimmerman.

13:10:47 --> 13:10:49

CG - Christine Zimmerman: Hi, I'm here and ready to go.

13:10:50 --> 13:10:52

Sarah Sullivant | CARB (she/her): Fantastic!

13:10:52 --> 13:10:56

Sarah Sullivant | CARB (she/her): Is there anyone that I missed in the call?

13:11:01 --> 13:11:03

Sarah Sullivant | CARB (she/her): Okay.

13:11:04 --> 13:11:07

Sarah Sullivant | CARB (she/her): Moving right along.

13:11:07 --> 13:11:09

Sarah Sullivant | CARB (she/her): so...

13:11:07 --> 13:11:19

Kevin Olp | CARB (he/him): Before we get started, I just had a quick question for the audience. I do see somebody that is impaneled has an otter, AI otter enabled. So just want to ask if

13:11:19 --> 13:11:24

Kevin Olp | CARB (he/him): that person is okay, we're gonna probably remove them, unless somebody speaks up.

13:11:26 --> 13:11:29

Deldi Reyes, CARB: Or unless it's for an accommodation.

13:11:31 --> 13:11:32

Kevin Olp | CARB (he/him): Thank you.

13:11:33 --> 13:11:42

Sarah Sullivant | CARB (she/her): Thank you, Kevin. I'll just note that we don't need quorum for today's meeting because no decisions will be made. Oh, Ryan, I see your hand.

13:11:43 --> 13:11:45

Ryan Hayashi: I'm just here.

13:11:43 --> 13:11:49

Sarah Sullivant | CARB (she/her): You are present. Do you have one word to share about how you're feeling?

13:11:45 --> 13:11:47

Ryan Hayashi: Present.

13:11:48 --> 13:11:49

Ryan Hayashi: Ready.

13:11:50 --> 13:11:53

Sarah Sullivant | CARB (she/her): All right. Nice to have you.

13:11:55 --> 13:11:58

Sarah Sullivant | CARB (she/her): Okay, great! well, with that...

13:11:57 --> 13:12:01

Deldi Reyes, CARB: Well, did we get an answer on the Otter AI question?

13:12:02 --> 13:12:04

Sarah Sullivant | CARB (she/her): I didn't hear anyone respond.

13:12:07 --> 13:12:11

Sarah Sullivant | CARB (she/her): One more chance if this is for an accommodation.

13:12:11 --> 13:12:15

Sarah Sullivant | CARB (she/her): your Otter AI that has joined.

13:12:15 --> 13:12:18

Sarah Sullivant | CARB (she/her): Otherwise, we will be removing that.

13:12:18 --> 13:12:19

Kevin Olp | CARB (he/him): I think we can move forward.

13:12:20 --> 13:12:22

Sarah Sullivant | CARB (she/her): Okay, great. Thank you.

13:12:22 --> 13:12:25

Sarah Sullivant | CARB (she/her): Okay, I will hand it over to Michelle.

13:12:25 --> 13:12:40

Michelle Byars - CARB: Great. Thank you so much. Yeah, so this is Michelle Byers, and I just want to give you just a warm welcome and thank you all for being here, for giving your time. Especially want to thank everybody who's come to the ad hoc meetings in between our main meetings and given their input and time and energy to helping us design and plan this meeting. It's super important and just your time is super valuable to us. So I just want to recognize all that. And also our staff who have been working

13:12:55 --> 13:13:13

Michelle Byars - CARB: diligently, along with partners like OEHHA and TTD who are presenting today. Thank you so much. I know we've given everybody very tight timelines, and everybody has delivered, so I'm just really, really glad to see that, and I look forward to having a really productive meeting today with all that information that we got.

13:13:18 --> 13:13:31

Michelle Byars - CARB: So just want to talk here are our meeting objectives. So the idea with this study session today is to dive deeper into the topics that were prioritized by the Consultation Group.

13:13:31 --> 13:13:44

Michelle Byars - CARB: We want to provide comments from everybody's perspective. So in other words, we're not looking for consensus, but we want to hear everybody's perspective so that it can guide the program and the development of Blueprint 3.0.

13:13:45 --> 13:13:51

Michelle Byars - CARB: We also want everyone to feel like they're learning about the various tools that there are to assess health benefits.

13:13:51 --> 13:13:57

Michelle Byars - CARB: And we're going to provide input on the roadmap to reduce our toxics.

13:14:00 --> 13:14:06

Michelle Byars - CARB: And here is the agenda that we developed with the ad hoc meeting participants.

13:14:06 --> 13:14:12

Michelle Byars - CARB: So, this is the order that we've come up with. So, just, ...

13:14:12 --> 13:14:17

Michelle Byars - CARB: brief. We've already covered several of these. We're going to have a very brief budget update and we're going to talk about the purpose of our study session a little more in depth and talk about the ad hoc meeting that happened to develop it. Then we will go into the community air protection program theory of change, talking about health and ways to assess the impact.

13:14:33 --> 13:14:49

Michelle Byars - CARB: And then we'll have a slight break and then we'll come back and we will talk about the roadmap to reduce air toxics. And then we'll recap, talk about next steps and have some public meeting or excuse me, public comment on each topic and then a final public comment as well.

13:14:53 --> 13:14:57

Michelle Byars - CARB: So with that, I am going to hand it over.

13:14:57 --> 13:14:59

Michelle Byars - CARB: I believe Monica is taking this one.

13:15:03 --> 13:15:16

Monica Guerra: Thank you, Michelle. Yes. So I wanted to provide a brief update on our most recent budget news, which will be impacting our fiscal year 2026 to 2027.

13:15:16 --> 13:15:32

Monica Guerra: so we... we split this slide, just so that... to give a little bit of orientation, in terms of slides that we basically can tap into now, and then... not slides, sorry, some funding that we can tap into now, and then funding that is dependent on future auction proceeds. So I'm going to have you guys turn to the top part of this slide. We know through Senate Bill 111 we've been allocated \$150 million towards the program, and there is a split outlined, as part of that Senate bill that tells us that \$92.5 million will go towards our incentives.

13:15:52 --> 13:16:00

Monica Guerra: \$50 million will go towards district implementation dollars, and then \$7.5 million will go towards our community air grants.

13:16:00 --> 13:16:16

Monica Guerra: We also know that \$1.6 million is coming to CARB from GGRF specifically via AB 113. And this will help fund the implementation of SB 352

13:16:16 --> 13:16:20

Monica Guerra: and support our statewide monitoring plan update.

13:16:20 --> 13:16:37

Monica Guerra: And then, we will also have \$1 million that will come from the general fund. This is also via AB113. this is money that is, is passing through us, but is actually going directly to the, San Diego Air District, for the purpose of, of the AIRE program.

13:16:38 --> 13:16:51

Monica Guerra: and that is to continue supporting, funding, air filters. air filters, given the issues with H2S, that that air district is facing.

13:16:51 --> 13:17:07

Monica Guerra: If we move towards the bottom half of this slide, we know that \$20 million has been committed in the form of grants to local governments in CERP communities. Again, this money is dependent on future auction proceeds, but we see that outlined

13:17:07 --> 13:17:24

Monica Guerra: as part of AB113. And the language that we're seeing in that legislation is that CARB, in consultation with the Office of Land Use and Climate Innovation, the Department of Housing and Community Development, and other local agencies, will support planning and transportation grants

13:17:27 --> 13:17:42

Monica Guerra: to further move along CERP objectives, CERP strategies that are already in existence. And to want to elevate again, this is funding that will go to local governments. It is separate from funding that would go specifically to air districts.

13:17:43 --> 13:17:59

Monica Guerra: And the last thing that I want to point to is the commitment of up to \$250 million to continue supporting the Community Air Protection Program. Now, again, dependent on future auction proceeds, this is an up-to amount. Here, CAPP remains in that

13:17:59 --> 13:18:13

Monica Guerra: Tier 3 as per SB840. Currently, we have no news on fund availability. As we continue to get additional information on the budget, we will continue to share it with you, but this is all we have as of right now. Thank you, Michelle.

13:18:18 --> 13:18:20

Sarah Sullivant | CARB (she/her): Great. Thank you, Monica.

13:18:20 --> 13:18:24

Sarah Sullivant | CARB (she/her): I think we are moving on to our next section.

13:18:28 --> 13:18:35

Sarah Sullivant | CARB (she/her): Yes, to Study Session Purpose. So I will hand it over to Dr. John Balmes.

13:18:30 --> 13:18:31

Michelle Byars - CARB: Thank you.

13:18:40 --> 13:18:44

CG Co Chair-John Balmes: Well, first of all, I want to thank everybody

13:18:44 --> 13:19:00

CG Co Chair-John Balmes: for showing up today at our first virtual study session. I think it's a great way for us to dive more deeply into topics that are important to all of us, and I also want to thank the members of the ad hoc group that helped plan the session today, because I think it really made a difference to how we,

13:19:08 --> 13:19:10

CG Co Chair-John Balmes: approached the session.

13:19:10 --> 13:19:12

CG Co Chair-John Balmes: So...

13:19:12 --> 13:19:17

CG Co Chair-John Balmes: I think I'm supposed to be diving into our first topic.

13:19:18 --> 13:19:21

CG Co Chair-John Balmes: Or am I getting ahead of myself?

13:19:20 --> 13:19:21

Kevin Olp | CARB (he/him): Right.

13:19:21 --> 13:19:23

Kevin Olp | CARB (he/him): You are.

13:19:22 --> 13:19:24

CG Co Chair-John Balmes: Okay.

13:19:24 --> 13:19:31

CG Co Chair-John Balmes: So, you know, I've been involved with AB617 right from the start. I kind of...

13:19:31 --> 13:19:34

CG Co Chair-John Balmes: Took the lead as a board member on this

13:19:34 --> 13:19:47

CG Co Chair-John Balmes: important... implementation of this important legislation, because, as I've said many times, probably too many times, that AB617 is a transformative

13:19:49 --> 13:19:52

CG Co Chair-John Balmes: bit of legislation. ...

13:19:52 --> 13:20:08

CG Co Chair-John Balmes: The US EPA, even when it's working properly, which it's not now, as we all know, focuses on criteria air pollutants at the regional level like ozone, PM 2.5, NO2, but we know especially low-income communities of color are impacted by other pollutants,

13:20:16 --> 13:20:28

CG Co Chair-John Balmes: which we'll talk about later, toxics in particular, and their exposure to those criteria pollutants is higher frequently than, at the regional level. So...

13:20:28 --> 13:20:39

CG Co Chair-John Balmes: the fact that the legislature passed AB617 to allow focus on community hotspots, both in terms of monitoring them

13:20:39 --> 13:20:49

CG Co Chair-John Balmes: and then trying to do something about those hotspots through the CERPs is incredibly important. And because

13:20:49 --> 13:21:01

CG Co Chair-John Balmes: we can't do everything, for every community in the state that needs it. I really am also pleased with the fact that we've gone to L-CERPs,

13:21:02 --> 13:21:15

CG Co Chair-John Balmes: for frequently nominated communities that haven't made designation as an official AB617 community, because there are so many communities in the state that need

13:21:15 --> 13:21:24

CG Co Chair-John Balmes: what we're learning about community exposures and how to implement ways to reduce them. And so,

13:21:24 --> 13:21:39

CG Co Chair-John Balmes: cumulative impacts is an important concept that really underlies AB617. So it's not just air pollution that's impacting low-income communities of color,

13:21:39 --> 13:21:43

CG Co Chair-John Balmes: so-called disadvantaged communities, though I hate that term. ...

13:21:43 --> 13:21:47

CG Co Chair-John Balmes: Because there's a lot of advantages to those communities, too.

13:21:49 --> 13:22:00

CG Co Chair-John Balmes: Cumulative impacts involve exposures, other than chemical, and other than air. water, housing issues, food deserts, ...

13:22:07 --> 13:22:19

CG Co Chair-John Balmes: you know, lack of access to good healthcare. So... and, the psychosocial effects of discrimination, and being an undocumented person in this country right now.

13:22:20 --> 13:22:33

CG Co Chair-John Balmes: Just to give some examples. And all of these impacts affect health, not just air pollution. So we could clean up air pollution completely in these communities, and there'd still be issues.

13:22:33 --> 13:22:44

CG Co Chair-John Balmes: But AB617 is a start, and it's focused on... on air pollution, but because of community steering committee engagement, you know, some...

13:22:45 --> 13:22:56

CG Co Chair-John Balmes: Other measures to improve quality of life in the designated communities have come forward, and I really am pleased with that.

13:22:56 --> 13:22:58

CG Co Chair-John Balmes: So, ...

13:23:01 --> 13:23:06

CG Co Chair-John Balmes: at the very first meeting of the AB617 Consultation Group in 2018

13:23:06 --> 13:23:23

CG Co Chair-John Balmes: community stakeholders said, well, it's great, we're trying to reduce emissions from hotspots, but how about public health? That's what we really care about. And right from the start, air districts, who were present at that meeting said, "Whoa!"

13:23:23 --> 13:23:34

CG Co Chair-John Balmes: We don't have the resources, both data resources and funding resources, to measure health outcomes in our AB 617 communities." So it's been an issue right since the start of the program.

13:23:36 --> 13:23:42

CG Co Chair-John Balmes: It's really important that we show community-engaged interventions are impacting health.

13:23:43 --> 13:23:52

CG Co Chair-John Balmes: You know, we have community steering committees saying, this is where you need to fix something, reduce exposure, and improve...

13:23:52 --> 13:23:56

CG Co Chair-John Balmes: health and quality of life. It's not been easy.

13:23:56 --> 13:24:01

CG Co Chair-John Balmes: And today, we're going to hear a little bit from our partner

13:24:01 --> 13:24:10

CG Co Chair-John Balmes: OEHHA, the Office of Environmental Health Hazard Assessment, who has been committed to environmental justice for a long time. ...

13:24:10 --> 13:24:25

CG Co Chair-John Balmes: They're starting to address how various CARB programs have impacted community health. And they... they're starting with air pollution, and you're gonna hear about that. But...

13:24:25 --> 13:24:34

CG Co Chair-John Balmes: It doesn't mean they're going to stop there. OEHHA is interested in the broad health picture of

13:24:34 --> 13:24:42

CG Co Chair-John Balmes: environmental justice communities. And so just remember, when you hear the presentation, it's focused on air pollution this time,

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CG Co Chair-John Balmes: but other, ...

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CG Co Chair-John Balmes: and other outcomes and other exposures can be studied.

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CG Co Chair-John Balmes: And, you know, I really like that OEHHHA is coming up with good data to help guide what we do with AB617 implementation. So, I'm going to turn it over to Paula

13:25:03 --> 13:25:05

CG Co Chair-John Balmes: to, ...

13:25:05 --> 13:25:08

CG Co Chair-John Balmes: and introduce what OEHHHA is doing.

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Kevin Olp | CARB (he/him): Before we do that, Paula, I jumped the gun and it was my mistake. We also have the report out from our ad hoc members, so I want to just take responsibility for that slight oversight. I'm going to pass it back to Sarah to introduce them and just share a little bit about some of the conversations we had in the ad hoc, and then we'll go ahead and jump into the presentation.

13:25:17 --> 13:25:18

CG Co Chair-John Balmes: Okay.

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CG Co Chair-John Balmes: Thank you, Kevin.

13:25:28 --> 13:25:40

Sarah Sullivant | CARB (she/her): Thank you, Kevin. Thank you, Dr. Balmes. Yeah, I just want to give an opportunity, to those who volunteered during our ad hoc planning sessions, and thank you again to all who took the time to help, guide the...

13:25:40 --> 13:25:57

Sarah Sullivant | CARB (she/her): agenda and discussion for today's study session through those ad hoc planning meetings. So we had a couple of volunteers that said they would share a little bit about those planning, those ad hoc planning meetings. So I want to invite Christine if you want to share a little bit about

13:25:57 --> 13:26:00

Sarah Sullivant | CARB (she/her): the ad hoc and then we'll go to Jasmine as well.

13:26:00 --> 13:26:08

CG - Christine Zimmerman: Thank you, Sarah. We had a couple of really good meetings where we had conversations through the ad hoc about

13:26:08 --> 13:26:25

CG - Christine Zimmerman: well, the opportunity and risk and potential that exists with what we have before us, what we're going to work on. It's a very good thing to see the air toxics roadmap enter into the community air protection space.

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CG - Christine Zimmerman: And to see how this process of implementing the roadmap, how that's going to play out, what it looks like, and what kinds of resources it'll ultimately translate to for communities to use and for regulated entities, which is the space I come from, to be able to engage in as well. I just think it builds out even further

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CG - Christine Zimmerman: what we're all able to do in this space and to make us better at our respective jobs, which is to improve public health and protect it and identify issues in spaces where we can work. And also.

13:27:05 --> 13:27:12

CG - Christine Zimmerman: lays out a pathway for better listening. It's still... the main point I always come back to in this space is that

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CG - Christine Zimmerman: Being good listeners is hugely important in this space. And so we spent a couple of

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CG - Christine Zimmerman: of hours here and there, talking about what all that looked like, how it rolls in together, and I understand there's still a lot of clarification to be done, and we're going to hear about that from OEHHHA today, but I think everyone who participated in the couple of meetings

13:27:34 --> 13:27:49

CG - Christine Zimmerman: walked away optimistic about how these all roll together and how that's going to make us better at preparing blueprints and doing all of the things that we do, even down to the CSC level. I think it'll influence conversations.

13:27:50 --> 13:28:00

CG - Christine Zimmerman: How do communities start to determine what their plans look like and what they advocate for? So, good experience all around, and I'm glad to have been a part of it.

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CG - Christine Zimmerman: Thanks, Sarah.

13:28:02 --> 13:28:09

Sarah Sullivant | CARB (she/her): Great. Thank you, Christine, so much for sharing. Jasmine, did you have anything you wanted to share out from the ad hoc meeting?

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CG-Jasmine Beltran: one important, point that was... that was brought up was, .

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CG-Jasmine Beltran: How, ...

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CG-Jasmine Beltran: How... the limited, ...

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CG-Jasmine Beltran: the limited of, of incentives and benefits. It shouldn't, okay, limited traditional. Hold on. How, the health,

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CG-Jasmine Beltran: health metrics weren't, including cardiovascular or cancer, and I think those were, are, have been very important, especially in the AB617 communities. How, you know, we've been seeing a lot more cancer rates going up.

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CG-Jasmine Beltran: And I thought that, you know, it's one of those things that should have been already part of it, you know? So I'm glad to see it

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CG-Jasmine Beltran: you know, on there, so we could build from it, or...

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CG-Jasmine Beltran: try something new.

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Sarah Sullivant | CARB (she/her): Great. Thank you, Jasmine. Anything else to add?

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Sarah Sullivant | CARB (she/her): All good?

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CG-Jasmine Beltran: So that's it. Thank you.

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Sarah Sullivant | CARB (she/her): Perfect.

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Sarah Sullivant | CARB (she/her): Thank you.

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Sarah Sullivant | CARB (she/her): All right. Well, back to Dr. Balmes' wonderful introduction, I'm going to continue turning it over to Paula.

13:29:22 --> 13:29:41

CG - Paula Torrado, OEHHA: Thank you so much, Sarah. Thank you, and good afternoon, everyone. My name is Paula Torrado-Plazas, and I'm the program director for OEHHA's Office of Environmental Health Education, Community Engagement, and Cumulative Impact Science. And I'm really excited to have this conversation with you, and thank you, Dr. Balmes, for that great introduction.

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CG - Paula Torrado, OEHHA: And looking into exposure, health and equity, and how OEHHA's research can support that. This presentation is not just about introducing another modeling tool. It is really about a question. I think it sits great at the heart of AB 617.

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CG - Paula Torrado, OEHHA: And how do we know, and that the question is, how do we know whether these investments or the programs and efforts and strategies are making a meaningful difference for the program or for our communities in general. And today I'm joined by my colleague, Rose Schmitz, and she will be presenting the technical slides.

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CG - Paula Torrado, OEHHA: There were also a few changes in the slides that you received on Friday, and we will make sure that you get the updated slides after today's presentation.

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CG - Paula Torrado, OEHHA: So to just get us started, as Dr. Balmes said, we know how to measure emissions reductions and pollution and tons in the air emissions, but communities experience much more than a number of tons reduced. They experience the air they breathe, their health and weather conditions around them

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CG - Paula Torrado, OEHHA: are actually changing. And ECHO-AIR, the modeling tool we're presenting today with OEHHA, gives us another way to start connecting those pieces from emissions to exposure to health, and more importantly, to equity. And today, we want to share your...

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CG - Paula Torrado, OEHHA: want to get your perspective on whether that could be useful and how to apply it to the AB617 context.

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CG - Paula Torrado, OEHHA: So what will we cover today? We're going to start pretty simply with what is ECHO-AIR? Why did we build it? What can it tell us? And how does it work?

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CG - Paula Torrado, OEHHA: But as you listen, and I think Dr. Balmes did a great, pre-empt for this, I want you to keep in mind the work that you do with air pollution, with your communities, with the programs at the state level, and understanding environmental trends.

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CG - Paula Torrado, OEHHA: And what would you want to know that you can easily see today in AB 617 and other programs? Because toward the end, we're going to bring this back to AB 617 and ask not only what ECHO-AIR can do now, but what would you want something like this to help us answer in the future. So next slide, please.

13:31:52 --> 13:32:09

CG - Paula Torrado, OEHHA: So what is ECHO-AIR? And at its core, ECHO-AIR is a modeling tool. But what makes it interesting, to me at least, is the question that it was designed to help us explore and discover. And it's when California makes an investment intended to reduce pollution

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CG - Paula Torrado, OEHHA: can we follow that investment further than the emissions number, that the tons, the particulate matter in the air is being reduced? Can we go further than that? Can we begin to understand what reduction of emissions means for exposure, for communities' exposure, for individual exposure, what it means for health?

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CG - Paula Torrado, OEHHA: And ultimately, who is benefiting and whether communities that are impacted the greatest or are on the front lines are benefiting first

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CG - Paula Torrado, OEHHA: and most. And that last question regarding equity is where ECHO-AIR becomes especially relevant to our conversation today.

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CG - Paula Torrado, OEHHA: And so again, ECHO-AIR is a modeling tool to help us study benefits and impacts of climate policies in prevalent communities, disadvantaged communities. I also don't like that term. Next slide, please.

13:33:00 --> 13:33:16

CG - Paula Torrado, OEHHA: so why we developed ECHO-AIR? So OEHHA developed ECHO-AIR with... in partnership with UC Berkeley, because we wanted a more accessible way to study the benefits, investments, and impacts of climate policies in communities that that have

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CG - Paula Torrado, OEHHA: greater burdens from air pollution. And we've already used it to look at things like heavy duty diesel trucks and California climate investments. And something interesting happened when we started looking at those investments. Some programs stood out, not just because they reduced emissions

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CG - Paula Torrado, OEHHA: the tons in the air, but because of the health benefits associated with where those reductions occur. And the Community Air Protection Incentives Program was one of those that stood out the most. And that started to raise a much more interesting question: Are all emission reductions equal,

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CG - Paula Torrado, OEHHA: when we think about health and equity?

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CG - Paula Torrado, OEHHA: And that final question is important, so let me sit with it a little bit, and then we can move on to the next slide.

So, yes, again, whether we can go further than the emissions reductions in the air.

13:34:06 --> 13:34:07

CG - Paula Torrado, OEHHA: Next slide.

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CG - Paula Torrado, OEHHA: So why is ECHO-AIR an important screening tool? This is where I would really lean into your voice and to start thinking deeply about how it could be useful for AB617 and other programs.

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CG - Paula Torrado, OEHHA: And this is where I think ECHO-AIR starts opening up a different conversation. If I tell you that a program reduced a certain number of tons of pollution, that's important, but it doesn't necessarily tell you who experienced cleaner air because of it, or whether those benefiting from those programs are the communities that are in most need of those benefits. So ECHO-AIR allows us to follow that story further. So we can look at exposure, we can look at health benefits, and then we can look at those benefits across race and ethnicity.

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CG - Paula Torrado, OEHHA: So CalEnviro... we also look at, those benefits according to CalEnviroScreen scores. The CalEnviroScreen is the environmental justice screening tool for California.

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CG - Paula Torrado, OEHHA: You can also look at priority populations, a definition that CARB has. For disadvantaged communities, specifically around low income and other characteristics that focus on socioeconomic status or other characteristics that communities want to know further about air pollution benefits,

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CG - Paula Torrado, OEHHA: addressing air pollution. So instead of only asking, did we reduce pollution, we can begin asking who benefited from that reduction? Did it reach people experiencing the greatest burden? And are disparities actually changing? For me, that's where this becomes an equity tool.

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CG - Paula Torrado, OEHHA: Next slide, please.

13:35:38 --> 13:35:55

CG - Paula Torrado, OEHHA: So what questions can ECHO-AIR answer? These three questions are really at the heart of today's presentation. So the first one is, did we improve public health? Who benefited? And are those benefits happening where they're needed most? So AB 617, as Dr. Balmes shared

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CG - Paula Torrado, OEHHA: was created because pollution burdens are not distributed equally. So if we're serious about understanding progress, I think we also have to be curious about whether the benefits of our investments and programs are being distributed equitably.

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CG - Paula Torrado, OEHHA: And I want you to keep in mind these three questions. And as Rose walks you through it, these three questions on emissions, public health, and equity.

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CG - Paula Torrado, OEHHA: So... and also, to start discussing, are these the right... the right questions? And what else would our communities, ABC617 programs, want to know from a tool such as ECHO-AIR?

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CG - Paula Torrado, OEHHA: And that makes the Consultation Group participants feel like you have a role in also shaping screening tools, modeling tools that can get data that's important to the work that we're all doing.

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CG - Paula Torrado, OEHHA: And next slide, please.

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CG - Paula Torrado, OEHHA: So how does ECHO-AIR work? So I'm going to let Rose actually take it from here to go through the technical aspects of ECHO-AIR, explaining InMAP, the precursor emissions, or the mortality function.

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CG - Paula Torrado, OEHHA: but more simply, it's a tool that looks at emissions.

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CG - Paula Torrado, OEHHA: and this is tons in the air, looks at exposure, and looks at health equity. And so we will be taking it from here, and I'll pass it to my colleague Rose to take it from here.

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Rose Schmitz, OEHHA: Thanks, Paula. Can everyone hear me okay?

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Sarah Sullivant | CARB (she/her): Yes.

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Rose Schmitz, OEHHA: Okay.

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Rose Schmitz, OEHHA: oh, I think if we go back to the last slide, I think maybe we'll give a little more detail about how the, how the model works. oh, next one. Yeah, perfect, that one. All right. So, thanks for the really great introduction to the, the,

13:37:48 --> 13:38:02

Rose Schmitz, OEHHA: the strengths of ECHO-AIR, Paula. ECHO-AIR is a tool that can estimate air quality and health impacts at a fine scale, like the census tract level, and a full statewide run takes about one day.

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Rose Schmitz, OEHHA: The tool brings together two established modeling approaches. For air quality, it uses InMAP, the intervention model for air pollution, to estimate PM2.5 exposure from precursor emissions. And for health, it uses the same PM2.5 mortality relationship applied by US EPA and CARB.

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Rose Schmitz, OEHHA: The precursor emissions that feed into the model include primary PM 2.5, NOx, SOx, VOCs, and ammonia.

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Rose Schmitz, OEHHA: These emissions are used to estimate annual average PM2.5 concentrations.

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Rose Schmitz, OEHHA: The health component then calculates excess mortality linked to those modeled PM 2.5 concentrations following US EPA and CARB guidance.

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Rose Schmitz, OEHHA: The results can be summarized at statewide or regional scales, and can be broken down by race and ethnicity, priority populations, low-income communities, and more.

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Rose Schmitz, OEHHA: A few important notes. ECHO-AIR is designed for statewide and regional analyses, not neighborhood level or community specific estimates. It's a screening tool that's meant to complement rather than replace more detailed air quality models.

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Rose Schmitz, OEHHA: Okay, next slide. And then Paula, do you want to go through the examples or would you like me to?

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CG - Paula Torrado, OEHHA: Oh, you could go to the examples, thank you.

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Rose Schmitz, OEHHA: Okay, great. So as Paula mentioned earlier, ECHO-AIR is really optimized for health equity. We can use it to show health benefits from different PM2.5 reduction strategies.

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Rose Schmitz, OEHHA: And it gives us a way to track progress and compare strategies, helping inform guidance on how to measure health benefits.

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Rose Schmitz, OEHHA: So, I'm gonna show you an example using community air protection incentives to show what this looks like in practice.

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Rose Schmitz, OEHHA: Next slide.

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Rose Schmitz, OEHHA: So the first thing we can ask is, did community air protection incentives reduce primary PM 2.5 emissions? Did it reduce NOx emissions? Yes, in both cases. And further, we see that community air protection incentives contributes a significant percentage to the total reductions from California Climate Investments programs that reduce those pollutants.

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Rose Schmitz, OEHHA: Next slide.

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Rose Schmitz, OEHHA: Then next we can ask, did community air protection incentives improve public health?

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Rose Schmitz, OEHHA: Yes. When we use ECHO-AIR to estimate the related health impacts, we see that community air protection incentives has a much larger effect on avoided mortality than its share of emissions reductions alone would suggest.

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Rose Schmitz, OEHHA: It delivers over a third of the avoided deaths, even though it accounts for only about a fifth of the primary PM 2.5 emission cuts. So this tells us that the program is reducing pollution in places where those reductions translate into meaningful health gains.

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Rose Schmitz, OEHHA: Next slide.

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Rose Schmitz, OEHHA: And next we can ask, did community air protection incentives further equity?

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Rose Schmitz, OEHHA: When we look at avoided mortality from this program across different racial and ethnic groups, we see that half of the health benefits go to communities of color.

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Rose Schmitz, OEHHA: And next slide.

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Rose Schmitz, OEHHA: And so in the three previous slides, we showed results from our analysis of community air protection incentives, but we've also used ECHO-AIR to study the health benefits of all California Climate Investments programs collectively. This analysis included all

records reported through October of 2025, which is the most current data available right now.

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Rose Schmitz, OEHHA: We found that across the state, priority populations are estimated to receive 85% of the avoided premature mortality benefits from California Climate Investments projects that reduce PM2.5.

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Rose Schmitz, OEHHA: Here, we're using CARB's definition of priority populations, meaning disadvantaged communities and low-income communities and households, as defined in SB 535 and AB 1550.

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Rose Schmitz, OEHHA: The bar chart in the middle shows that communities of color are estimated to receive close to half the avoided premature mortality benefits

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Rose Schmitz, OEHHA: from California Climate Investments projects.

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Rose Schmitz, OEHHA: I mentioned earlier, we can also break down our results by low-income and other communities.

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Rose Schmitz, OEHHA: We can see that low-income communities are estimated to receive 70% of the avoided mortality benefits.

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Rose Schmitz, OEHHA: And I just want to mention the results and figures for priority populations and racial and ethnic groups are included in the 2026 annual report to the legislature on California climate investments.

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Rose Schmitz, OEHHA: Next slide.

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Rose Schmitz, OEHHA: And just a couple of notes about our analysis. We used the estimated co-pollutant reductions reported in the California Climate Investments Reporting and Tracking System database.

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Rose Schmitz, OEHHA: The methods for estimating these co-pollutant reductions were developed in 2016, so our analysis includes data reported from 2017 and later.

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Rose Schmitz, OEHHA: Also, while typical ECHO-AIR inputs include more pollutants, our analysis was limited by the data that's reported for California Climate Investments programs. So just primary PM 2.5, NOx, and reactive organic gases, also called VOCs or volatile organic compounds.

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Rose Schmitz, OEHHA: Because of these limitations, the results that we've shared on all-cause mortality, or avoided all-cause mortality, may be underestimates.

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Rose Schmitz, OEHHA: And next slide.

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Rose Schmitz, OEHHA: And then for the CAPP incentives results, a little extra context, we modeled impacts statewide, not just within the 19 AB617 communities because ECHO-AIR is designed for regional and statewide assessments rather than neighborhood level comparisons.

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Rose Schmitz, OEHHA: As we mentioned earlier, the tool isn't meant for comparing one community to another.

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Rose Schmitz, OEHHA: another note, not all California Climate Investments Programs have methods for estimating co-pollutant reductions yet, so some programs that do reduce air pollution wouldn't be included in our analysis.

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Rose Schmitz, OEHHA: And our results on community air protections and incentives reflect data through 2023, which is a period when many communities CERPs were still just beginning. And as time allows, we plan to update this analysis with newer data.

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Rose Schmitz, OEHHA: And then now I will turn it back to Paula.

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CG - Paula Torrado, OEHHA: Thank you, Rose. Thank you. So yeah, next slide, please.

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CG - Paula Torrado, OEHHA: Okay, so now let's make this real for AB 617, taking it back to from the examples that Rose showed on community air protection incentives and the California Climate Investments. What are the applications to AB 617, measuring investments where they are needed most?

13:45:07 --> 13:45:23

CG - Paula Torrado, OEHHA: Something we've shared, an idea we've shared throughout the presentation is that success is not only how many tons of emissions we've reduced, but it's also whether those reductions translate into better health outcomes. In this case, for this analysis, avoided mortality.

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CG - Paula Torrado, OEHHA: Whether those benefits reach communities experiencing the greatest burden. So this analysis can go further to race

ethnicity analysis or CalEnviroScreen scores in terms of environmental justice definitions or disadvantaged communities definitions,

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CG - Paula Torrado, OEHHA: and whether those benefits reach, are helping us reduce environmental health disparities. So everything we've shown you brings us back to AB 617. And we've traditionally had a very clear way of describing progress for

13:45:54 --> 13:46:10

CG - Paula Torrado, OEHHA: AB 617 or for general air pollution programs. How much pollution did we reduce? And that matters. But I think ECHO-AIR can give us an opportunity to ask those different second layers of questions. Did we reduce emissions?

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CG - Paula Torrado, OEHHA: Did those reductions of emissions translate into health benefits? Who received those benefits? And most importantly, what are we still not seeing? Because ECHO-AIR isn't the one size fits all answer to every question.

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CG - Paula Torrado, OEHHA: But it can tell us, and it can't tell us what's happening in one individual AB 617 community. It doesn't capture every health outcome or every benefit of those investments. But imagine using it alongside what communities already know. Local monitoring,

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CG - Paula Torrado, OEHHA: local CERPs information and other AB617 data, then we begin to have a richer picture of success and metrics. Not simply how much did we spend, tons we've reduced, but with the data that we have already collected, CARB has already collected through the last 5 years of AB617 implementation.

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CG - Paula Torrado, OEHHA: It gives a more larger perspective of the data we have.

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CG - Paula Torrado, OEHHA: So ECHO-AIR isn't here to tell a community whether an investment was successful or not, but it brings more knowledge and experience that a statewide model cannot capture, but it brings that much more level of in-depth information.

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CG - Paula Torrado, OEHHA: And what this can potentially do is give us another piece of evidence, one that connects, again, emissions to health.

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CG - Paula Torrado, OEHHA: And ask better questions about equity.

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CG - Paula Torrado, OEHHA: so...

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CG - Paula Torrado, OEHHA: To get us further into what could be possible, we wanted to get into a discussion with the Consultation Group.

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CG - Paula Torrado, OEHHA: So next slide, please.

13:47:41 --> 13:48:01

CG - Paula Torrado, OEHHA: So we had a few discussion questions for today. We've already told the story of ECHO-AIR, why it was created, how it works, some case scenarios, some examples, some data. And for the Consultation Group members, we want to ask first, what can ECHO-AIR do now to show success of AB 617 efforts

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CG - Paula Torrado, OEHHA: at the statewide level, or across all AB617 communities, to evaluate trends across all AB617, or in your community?

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CG - Paula Torrado, OEHHA: And whether it can be expanded from emissions to health assessments, and if so, how?

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CG - Paula Torrado, OEHHA: so that's... that's the first iteration of the question, and then next we can talk about how can ECHO-AIR be expanded in the future to support your advocacy for AB617 efforts.

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CG - Paula Torrado, OEHHA: So, we wanted to start here, and I don't know if folks have any questions about the presentation, ECHO-AIR as a modeling tool, screening tool.

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CG - Paula Torrado, OEHHA: Or any thoughts that you have so far?

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Sarah Sullivant | CARB (she/her): Thanks so much, Paula. If folks want to raise their hands, we will call on you, hopefully in the order that you raise your hand.

13:48:44 --> 13:48:45

CG - Paula Torrado, OEHHA: Thank you.

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Sarah Sullivant | CARB (she/her): and I'm gonna ask Malinda to help me keep track of the queue.

13:48:57 --> 13:49:03

Sarah Sullivant | CARB (she/her): I believe we had Kevin, I saw his hand first, so I'm gonna call on Kevin.

13:49:04 --> 13:49:06

CG - Kevin D Hamilton, RRT,ACS: Sure.

13:49:06 --> 13:49:10

CG - Kevin D Hamilton, RRT,ACS: So, we got a new toy.

13:49:10 --> 13:49:13

CG - Kevin D Hamilton, RRT,ACS: So, I'm curious as to...

13:49:13 --> 13:49:22

CG - Kevin D Hamilton, RRT,ACS: you know, the resolution of it compared to what we've been, what OEHHA has been doing previously. I mean, this data is being collected

13:49:24 --> 13:49:27

CG - Kevin D Hamilton, RRT,ACS: Yeah, I... so how is this different?

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CG - Kevin D Hamilton, RRT,ACS: I mean, it seems to be aggregating data from a lot of different places. CalEnviroScreen is doing that as well.

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CG - Paula Torrado, OEHHA: Rose?

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CG - Kevin D Hamilton, RRT,ACS: You know, we've got a number of air networks out there, so I'm trying to wrap my head around, you know, what...

13:49:45 --> 13:49:56

CG - Kevin D Hamilton, RRT,ACS: what's the end report looks like? Look what the end report looks like from ECHO-AIR that's so different than... and so much more useful than the other tools we already have.

13:49:56 --> 13:49:58

Alvaro Alvarado - OEHHA: So to me.

13:49:56 --> 13:50:00

CG - Kevin D Hamilton, RRT,ACS: So I probably would need some real-life examples for that.

13:50:00 --> 13:50:17

Alvaro Alvarado - OEHHA: I can jump in. So you mentioned monitoring, you mentioned CalEnviroScreen and ECHO-AIR. So they kind of all three have different purposes. So CalEnviroScreen is...

13:50:17 --> 13:50:35

Alvaro Alvarado - OEHHA: puts together, at the census tract level, you know, 21 different layers that measure pollution and socioeconomic vulnerability and puts those together. And that's a snapshot in time, and that... that snapshot is, you know, is...

13:50:35 --> 13:50:55

Alvaro Alvarado - OEHHA: is gonna be, you know, a year or two old. We just released CalEnviroScreen 5.0. So that's, so that's that one snapshot around pollution and vulnerability. monitoring is gonna tell you about what is happening. It might, you know, it might give you an annual average, it might give you daily what is happening today

13:50:55 --> 13:51:13

Alvaro Alvarado - OEHHA: at a particular monitor, in that community where that monitor is located. And so that's what those two give you. ECHO-AIR is a little different than that. So it's gonna look at the emissions inventory. It's gonna look at the emissions changes over time.

13:51:13 --> 13:51:26

Alvaro Alvarado - OEHHA: And then it's gonna tell you, what those, where the impacts of those changes are gonna be, and the health impacts. The resolution

13:51:26 --> 13:51:46

Alvaro Alvarado - OEHHA: is, has a fine resolution. But the really, the fine resolution, I want to say, is not as reliable as, you know, when you average over a larger area. So it can tell you something about, when you aggregate various communities together, is going to be the...

13:51:46 --> 13:51:48

Alvaro Alvarado - OEHHA: that's the best way to look at it.

13:51:48 --> 13:51:52

Alvaro Alvarado - OEHHA: Did that help, Kevin?

13:52:01 --> 13:52:03

Sarah Sullivant | CARB (she/her): Kevin, if you're speaking, you may be muted.

13:52:08 --> 13:52:15

Sarah Sullivant | CARB (she/her): All right. Well, we'll move on to our next raised hand. I believe that is Rebecca Skinner.

13:52:15 --> 13:52:32

CG - Rebecca E Skinner: Yeah, I understand that ECHO-AIR is a large epidemiological study basically, but such studies are large longitudinal studies

13:52:32 --> 13:52:47

CG - Rebecca E Skinner: are not necessarily, the best proponents for the... for, you know, at the six-month or the three-month interval of, board meetings or other... other things that, that they may not be appreciative of,

13:52:52 --> 13:53:08

CG - Rebecca E Skinner: appreciative of the longer period during which people continue living. So it would seem to be that ECHO-AIR will prove itself over a longer period of time, which may not help, you know, next week or next month.

13:53:10 --> 13:53:17

Hye-Youn Park, OEHHA: Hello, hi, this is Hye-Youn from OEHHA. I will try to answer your question. That's a good point.

13:53:17 --> 13:53:35

Hye-Youn Park, OEHHA: In epidemiological studies, yes, you're correct that our ECHO-AIR, depending on the concentration and response function from the mortality study, by the long-term exposure and a lot of tools out there, including

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Hye-Youn Park, OEHHA: U.S. EPA, BAAQMD, and such, they all depend on mortality studies, and as you can tell, the association between long-term exposure of PM

13:53:47 --> 13:54:04

Hye-Youn Park, OEHHA: and mortality are well established, unlike short-term and other pollutants for certain endpoints. So that's why we, including EPA, they have priority to look at this long-term exposure PM around mortality. But speaking of short-term exposure.

13:54:04 --> 13:54:21

Hye-Youn Park, OEHHA: For that matter, we have to pick different health endpoints, such as some hospitalization or the emergency room visit. So that can be something we can explore for the next version of ECHO-AIR

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Hye-Youn Park, OEHHA: in the health endpoint category. But for this specific presentation, and our current tool is not capturing short-term exposure and relevant endpoint for the moment.

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Hye-Youn Park, OEHHA: But thank you for bringing up the question.

13:54:39 --> 13:54:43

CG - Kevin D Hamilton, RRT,ACS: So I got my, my mic back, by the way. Sorry about that.

13:54:40 --> 13:54:41

Sarah Sullivant | CARB (she/her): Thank you.

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Sarah Sullivant | CARB (she/her): No worries.

13:54:48 --> 13:54:54

Sarah Sullivant | CARB (she/her): All right. Moving on to the next hand. I believe we had Diane Takvorian.

13:54:56 --> 13:55:02

CG Co Chair-Diane Takvorian: Thank you so much. Thanks for the presentation. It's really...

13:55:02 --> 13:55:18

CG Co Chair-Diane Takvorian: you know, very interesting to see the ways in which you're using the data. I have to say, I had a similar question to Kevin's because I'm trying to figure out, so how do we add this to our toolbox? How is it useful to us?

13:55:18 --> 13:55:33

CG Co Chair-Diane Takvorian: So I think I have a couple clarifying questions. So I think, Alvaro, you said that it's better, that the fine resolution is not as reliable as the larger area. So my first question is

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CG Co Chair-Diane Takvorian: how large an area are you referencing here?

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Alvaro Alvarado - OEHHA: I think I...

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Alvaro Alvarado - OEHHA: like, how big is the question, right? I wonder if I can call on Josh Apte. He...

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Joshua Apte, UC Berkeley: Yeah, of course. Thanks so much, Alvaro.

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Alvaro Alvarado - OEHHA: If you don't know Josh, Josh is a professor at UC Berkeley. OEHHA collaborated with Josh and his team to develop ECHO-AIR.

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Joshua Apte, UC Berkeley: Yeah, so I think the thing is that ECHO-AIR actually represents the world at a kilometer-by-kilometer scale.

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Joshua Apte, UC Berkeley: And so our individual pixels are really that fine. The thing is you should never trust ECHO-AIR to say this one kilometer is correct. It's more that when you aggregate those fine spatial patterns

13:56:33 --> 13:56:43

Joshua Apte, UC Berkeley: you can start to pick up disparities that would never be possible to see with many other modeling techniques. And so, what ECHO-AIR is designed to do is be the sweet spot

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Joshua Apte, UC Berkeley: between a few different goals. One is to be fine enough to capture the spatial scales at which disparities exist.

13:56:51 --> 13:57:04

Joshua Apte, UC Berkeley: The second, and this is really the crucial one, is to be able to trace how emission changes lead to air quality changes. So if we're making measurements in the community, like with sensors, like Kevin was talking about.

13:57:04 --> 13:57:13

Joshua Apte, UC Berkeley: That's powerful for saying, what is the total level of pollution? But because PM2.5 comes from such a diversity of sources.

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Joshua Apte, UC Berkeley: It's very difficult to say, oh, we see this small concentration change. What caused it? Was it really the policy we're interested in or was it natural variability or many other things? So ECHO-AIR allows you to make that causal linkage very precisely.

13:57:30 --> 13:57:39

Joshua Apte, UC Berkeley: The key issue that you're asking about, Diane, is how fine is fine enough? And what I would say is we trust ECHO-AIR

13:57:39 --> 13:57:54

Joshua Apte, UC Berkeley: at the scale of putting a few similar communities together to see patterns. But I would not trust ECHO-AIR to tell me in this corner of this one community, this one source matters precisely this much.

13:57:54 --> 13:58:03

Joshua Apte, UC Berkeley: A little bit of shades of gray. But the point is that we can start to see the kind of sources that impact similar disadvantaged communities around the state.

13:58:05 --> 13:58:07

Joshua Apte, UC Berkeley: Maybe that, maybe that clears things up.

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CG Co Chair-Diane Takvorian: Okay.

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CG Co Chair-Diane Takvorian: Okay, ...

13:58:11 --> 13:58:27

CG Co Chair-Diane Takvorian: I guess I'm trying to wrap my mind around that we fought hard for CalEnviroScreen to be at a census tract level because a lot of the emission sources in EJ communities are at are at a

13:58:27 --> 13:58:46

CG Co Chair-Diane Takvorian: pretty fine resolution if we're using that kind of language, right? So, if you can't look at the census tracts, immediately adjacent to a distribution center, to a port, to an international border, it's hard to know whether the emission reductions are having the,

13:58:46 --> 13:59:01

CG Co Chair-Diane Takvorian: the kind of effect that we hope they will. And so what we're relying on really is that a zero-emission truck is emitting less than a diesel-powered truck. And so,

13:59:01 --> 13:59:16

CG Co Chair-Diane Takvorian: If we know how many trucks there are, you know, you make the math that way. So I'm trying to figure out the advantages of ECHO-AIR over watching the application of a particular policy or an incentive-based program that had,

13:59:16 --> 13:59:23

CG Co Chair-Diane Takvorian: in this example, traded out diesel trucks for zero emission trucks.

13:59:23 --> 13:59:36

Joshua Apte, UC Berkeley: Maybe I'll just speak to that really quickly. I think one needs both measurements and models. And in my own group's work, we use both because they're really valuable for answering exactly the kind of questions you're pointing to.

13:59:36 --> 13:59:54

Joshua Apte, UC Berkeley: The value of models is that you can – the value of measurements is that you can see exactly what happens where you care and for the receptors, the people, the locations, that matter the most. But the value of models is that you can simulate what would happen under different circumstances.

13:59:54 --> 14:00:02

Joshua Apte, UC Berkeley: And then at a scale that's fine enough to see the impact in disadvantaged communities. So for planning, it's also really helpful for saying,

14:00:02 --> 14:00:08

Joshua Apte, UC Berkeley: you know, how the trends evolved over periods of time where we didn't have monitors because we can't afford to monitor everywhere.

14:00:08 --> 14:00:24

Joshua Apte, UC Berkeley: And I have slides and images I could share. I'm not sure if that's allowed given the policy rules here, but I'm happy to screen share an example of like how Echo Air is used and has been used by OEHHA for disadvantaged communities,

14:00:24 --> 14:00:29

Joshua Apte, UC Berkeley: to show how different disadvantaged communities with different mixtures of

14:00:29 --> 14:00:40

Joshua Apte, UC Berkeley: vehicles, for instance, have very different drivers of what the disparity impacts are. And so that allows us to see the differences among different communities. It allows us to see the trends over time.

14:00:40 --> 14:00:48

Joshua Apte, UC Berkeley: But the reason I'm just being a little bit cautious about modeling air pollution for a particular census tract

14:00:48 --> 14:01:02

Joshua Apte, UC Berkeley: only, because we actually do represent individual census tracts within ECHO-AIR, it's just that we would discourage the user from zooming so far down to that census tract and saying, that is the truth of that tract, because unless you know the emissions that are input into the model

14:01:02 --> 14:01:20

Joshua Apte, UC Berkeley: really well, unless you've really ground truth the model for that one tract in particular, it's hard to be too precise. But when we see these patterns over and over again across the state, we do know that the disparate burden of emissions close to the priority communities we care about is really there.

14:01:20 --> 14:01:23

Joshua Apte, UC Berkeley: It's just that you don't want to

14:01:23 --> 14:01:35

Joshua Apte, UC Berkeley: precisely state that for one particular tract, you know, you know with a high degree of precision exactly what's happening. So there's a need to be responsible in how it's used, if that makes sense, even though we can see individual tracts.

14:01:36 --> 14:01:38

CG Co Chair-Diane Takvorian: Okay. Thanks.

14:01:36 --> 14:01:39

Kevin Olp | CARB (he/him): Just to add to that, Diane.

14:01:39 --> 14:01:59

Kevin Olp | CARB (he/him): You know, I think those early slides, it is really validating that 80% of our budget is CAPP incentives and being able to show that while we estimate we're reducing about 16% of total emissions in CCI, that much greater proportion, about 34% of exposure where people are, those emissions are being reduced.

14:01:59 --> 14:02:17

Kevin Olp | CARB (he/him): shows that when we use these emissions inventories and monitors in an intentional way, partnering with communities in terms of where and what projects are selected, that it really works in terms of disproportionately reducing exposure. So I think that's... it's helpful in the short term in terms of proving the program theory.

14:02:17 --> 14:02:28

Kevin Olp | CARB (he/him): We also want to use this as a space to ask the questions about how we can advance this technology and data sets so we can, over time, be able to do these sub-basin

14:02:28 --> 14:02:43

Kevin Olp | CARB (he/him): estimates of, you know, at the census tract level or within each individual selected community. So I think part of this conversation is how do we use the tools we have in this program to advance that science so we can make more precise estimates in the future.

14:02:44 --> 14:02:59

Alvaro Alvarado - OEHHA: And let me also add, Diane, to your example around trucks and zero emission trucks. So it matters. So it's not just the emissions that are reduced. It matters

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Alvaro Alvarado - OEHHA: if the emissions are at ground level, like from a truck, they'll have a certain place where they're impacting.

14:03:07 --> 14:03:14

Alvaro Alvarado - OEHHA: It matters if the emission is coming out of a stack, because the stack will mean the emissions are more downwind.

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Alvaro Alvarado - OEHHA: A model is going to help you discern that. How far away from the emission source is the greatest impact? That's going to depend on the stack height, or is it at ground level? It's going to depend on the meteorology,

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Alvaro Alvarado - OEHHA: on the wind speed and direction. All of that, you can't... you can't say with just an emissions inventory. You can't do that with... with monitoring. You can do that with... you can do that with... with a model, like ECHO-AIR.

14:03:45 --> 14:04:05

CG Co Chair-Diane Takvorian: Yeah, no, I appreciate that. And I wanna stop because I don't wanna take up any more time. But two things I hope we can talk about in the future are one, how you can use what you just said to reinvigorate the land use guidance that CARB did 25 years ago, 20 years ago, because that's exactly the kind of data that we need

14:04:05 --> 14:04:21

CG Co Chair-Diane Takvorian: to begin to really provide that kind of information to local land use authorities so that they have better data going into the kinds of land use decisions they have to make. And... and then back to the other

14:04:22 --> 14:04:40

CG Co Chair-Diane Takvorian: ways in which this can get used. I think it's important to look at how your data, the ECHO-AIR data, compares to the predictive data that we as board members and the public see when we're looking at policies. So if this can improve that, I think that's really important

14:04:40 --> 14:04:48

CG Co Chair-Diane Takvorian: for all of us, but as a board member, I really appreciate that as well. So thank you. I'm going to quit taking up so much time. Thank you.

14:04:51 --> 14:04:58

Sarah Sullivant | CARB (she/her): Thank you for the robust discussion. On to the next hand raised. I believe we have Jasmine.

14:05:00 --> 14:05:04

CG-Jasmine Beltran: My question is, in the end,

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CG-Jasmine Beltran: I mean, will it be triggering some kind of action to be done

14:05:09 --> 14:05:21

CG-Jasmine Beltran: or to take effect? Like, inspections or anything like that? Like, I mean, if we already know, for example, it's showing us certain, you know,

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CG-Jasmine Beltran: pollution, and in the end, what's gonna trigger a change? That's the part that... I'm missing something there. I know that could also be

14:05:34 --> 14:05:40

CG-Jasmine Beltran: together with, putting it with modules like sensors or fenceline monitoring,

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CG-Jasmine Beltran: might be a good one to connect with the tool. But also

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CG-Jasmine Beltran: wanted to make a comment about

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CG-Jasmine Beltran: the fact that...

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CG-Jasmine Beltran: the community science level, like, you know, there's a lot of...

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CG-Jasmine Beltran: science, I mean, experiments or scientific community members that have already, like, I guess, advanced

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CG-Jasmine Beltran: to that point. I was wondering about that.

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CG-Jasmine Beltran: You know, what if

14:06:20 --> 14:06:30

CG-Jasmine Beltran: there's other tools that are already out there that already do what the tool is doing and probably a little bit more than that.

14:06:31 --> 14:06:40

Alvaro Alvarado - OEHHA: You had a number of questions, but let me start and then we can maybe have a...

14:06:33 --> 14:06:34

CG-Jasmine Beltran: Okay.

14:06:40 --> 14:06:51

Alvaro Alvarado - OEHHA: have, like, a conversation around it. The question was around, like, what difference is it gonna make? And I think

that's a really, really excellent question, right? The question is around,

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Alvaro Alvarado - OEHHA: we know that emissions reductions are good, right? The question is

14:07:00 --> 14:07:17

Alvaro Alvarado - OEHHA: are the emissions reductions having the impact that you expect, right? We talked about diesel, you know, emissions reductions are gonna have, you know, their impact is gonna be at a certain place. Whereas a high stack is gonna have their reductions, their

14:07:17 --> 14:07:30

Alvaro Alvarado - OEHHA: impact is going to be in a different place, right? So, which sort of actions are going to have the biggest impact in the community that you're hoping for, right?

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Alvaro Alvarado - OEHHA: You know, ECHO-AIR can answer that type of question when you look at the different types of sources.

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Alvaro Alvarado - OEHHA: It also can answer questions about where. The problem may be in one community, but the emissions may be coming from outside of the community, or they may be coming from inside the community. Understanding where the emissions are coming from that are impacting a community is something that ECHO-AIR can do.

14:07:58 --> 14:08:02

Alvaro Alvarado - OEHHA: So that's gonna... that helps that kind of prioritizing.

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CG-Jasmine Beltran: So, can ECHO-AIR do that right now, or that hasn't been, developed, or is in the process?

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Alvaro Alvarado - OEHHA: It can do that now. It can do that now.

14:08:08 --> 14:08:10

CG - Paula Torrado, OEHHA: It can do that now, yeah.

14:08:10 --> 14:08:25

CG-Jasmine Beltran: Okay, so what will CARB then do about it? In other words, what will be the trigger of some sort of action being taken by the district or CARB? You know, there has to be a certain

14:08:25 --> 14:08:35

CG-Jasmine Beltran: you know, threshold, I guess, when it starts becoming, something that we take action on and stop it, you know?

14:08:35 --> 14:08:42

CG-Jasmine Beltran: Not just monitor it but actually go out there and make that possible.

CG-Jasmine Beltran: I'm thinking more like prediction, in a way. Because, I mean, in the end, that's actually what we should be aiming for, to be able to know what's going to happen before it happens. With all the data that we already have

14:08:59 --> 14:09:14

CG-Jasmine Beltran: everywhere we should be able to predict, pinpoint exactly where and everything by now. But, so my question is like, what will CARB do to, you know, once that...

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CG-Jasmine Beltran: What will trigger CARB to take action or the district to take action? At what point?

14:09:21 --> 14:09:36

Alvaro Alvarado - OEHHA: I think CARB can answer that question, but I think CARB is already taking action, right? This AB 617 group is taking action. This helps us understand what actions to take, not if there's an action to take.

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Kevin Olp | CARB (he/him): Yeah, thanks, Jasmine.

14:09:21 --> 14:09:23

CG - Paula Torrado, OEHHA: Thank you. Oh.

14:09:28 --> 14:09:29

Joshua Apte, UC Berkeley: Yeah. Okay.

14:09:28 --> 14:09:30

CG - Paula Torrado, OEHHA: Yes.

14:09:36 --> 14:09:40

Alvaro Alvarado - OEHHA: But I don't know. I'll let Kevin.

14:09:38 --> 14:09:40

Joshua Apte, UC Berkeley: Hey, Jasmine.

14:09:38 --> 14:09:56

CG - Paula Torrado, OEHHA: No, and I wanted to add, Jasmine, thank you for that question, because I know where you're heading towards, like, what's the enforcement, the action, what are the districts going to do, but most importantly for the community-based organizations, the EJ community, the AB617 community members, is to,

14:09:56 --> 14:10:07

CG - Paula Torrado, OEHHA: to have access to the information that can help you identify the priorities, the strategies that where, where the funding, the investments, the strategies are making the most impact.

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CG - Paula Torrado, OEHHA: And that can help prioritize further action, right? So ECHO-AIR helps you get that layer of information, that extra layer of information that can then inform advocacy or actions, right? And I think Kevin wanted to share more. Oh, go ahead, Jasmine, sorry.

14:10:18 --> 14:10:19  
CG-Jasmine Beltran: So...

14:10:20 --> 14:10:26  
CG-Jasmine Beltran: So, in the end, if, ... okay, so in the end, when... if this gets, ...

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Joshua Apte, UC Berkeley: Yeah.

14:10:26 --> 14:10:33  
CG-Jasmine Beltran: to be put in, that's already being brought to, CARB.  
...

14:10:33 --> 14:10:38  
CG-Jasmine Beltran: Will it be the only source that will be accepted as a trigger?

14:10:35 --> 14:10:37  
CG - Paula Torrado, OEHHA: Mmm.

14:10:38 --> 14:10:52  
CG-Jasmine Beltran: Or will it be that the scientific community could also, you know, I guess monitor or, you know, do the same thing as ECHO-AIR?

14:10:52 --> 14:11:10  
Kevin Olp | CARB (he/him): Yeah, I can, I can answer that question, Jasmine. And I do want to, after this, Jasmine, I do want to go to the next person just to make sure we have enough time to get through this.

14:10:59 --> 14:11:01  
CG-Jasmine Beltran: Okay, I'm sorry, yes. Go ahead.

14:11:10 --> 14:11:27  
Kevin Olp | CARB (he/him): No, no, no, no problem at all. We're just running a little bit behind. So, so first of all, I just want to clarify, we're specifically talking about in our, in this analysis, just those incentive projects that we're funding. So, if you remember when you're doing this, or CSC, and you're thinking about, do we want to phase out this source or that, and use the money to go towards that? And so, we do, then can research that afterwards and say, how much did those projects, you know, disproportionately end up in

14:11:27 --> 14:11:44  
Kevin Olp | CARB (he/him): places near where people live, work, and play, and reduce emissions. And it can definitely inform in the future, helping to understand, for example, which incentive project types most contribute

to exposure reduction, and that can inform future CERPs in terms of what is selected or prioritized.

14:11:44 --> 14:12:07

Kevin Olp | CARB (he/him): And that kind of analysis also in terms of which populations are being reached are also important to answering the questions around are we reaching the most overburdened communities and the communities that need it the most. And so it's not so much of a trigger as much as it's a way to analyze the effectiveness of what we've been doing and then ask more critical questions of how we can do that better.

14:12:07 --> 14:12:20

Kevin Olp | CARB (he/him): And certainly, I think we can write guidance in the future of how we can use tools like this to try to measure our program progress over time in different ways that help to, you know, estimate are we achieving our mission in this program.

14:12:21 --> 14:12:24

Kevin Olp | CARB (he/him): So I hope that answers your question. Thank you so much.

14:12:24 --> 14:12:39

Alvaro Alvarado - OEHHA: And forgive me, I actually have a doctor's appointment, so I'm gonna have to run, but I'll catch up with my OEHHA colleagues later and hear about the discussion. It's been really fantastic. Thank you.

14:12:25 --> 14:12:26

CG - Paula Torrado, OEHHA: Thank you, Jasmine.

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CG-Jasmine Beltran: Okay, thank you!

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CG - Paula Torrado, OEHHA: Thanks, Alvaro.

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CG - Paula Torrado, OEHHA: Thank you, Jasmine, for that question, and please feel free to reach out to us with any question. Thank you.

14:12:42 --> 14:12:43

Sarah Sullivant | CARB (she/her): Thank you.

14:12:47 --> 14:12:53

Sarah Sullivant | CARB (she/her): Thank you, Paula. Thank you for joining us, Alvaro. I'm going to move on to the next hand we have raised, it's Tim Carmichael.

14:12:56 --> 14:13:12

CG-Tim Carmichael: Thank you, OEHHA team and UC Berkeley team. Very interesting. Two questions quickly. One, is the tool refined enough to help us identify the most effective investments?

14:13:12 --> 14:13:26

CG-Tim Carmichael: That's very important to me and many of my colleagues relative to State funding programs. And then the second question is

14:13:26 --> 14:13:42

CG-Tim Carmichael: how do you account for or filter out other investment programs or the natural chain of events or course of events? A business replaces its

14:13:42 --> 14:13:50

CG-Tim Carmichael: equipment or vehicles, but receive no incentive funding, or a business shuts down entirely. For...

14:13:50 --> 14:13:53

CG-Tim Carmichael: you know other reasons.

14:13:53 --> 14:14:08

CG-Tim Carmichael: How is that? So this is a 2-parter. Can we identify the most effective investments based on your analysis? And then how do you account for other investment programs or other

14:14:09 --> 14:14:14

CG-Tim Carmichael: changes that happen that are unrelated to these investments.

14:14:14 --> 14:14:18

Joshua Apte, UC Berkeley: That's a great question, Tim. Sorry. And I think...

14:14:18 --> 14:14:33

Joshua Apte, UC Berkeley: If I explain a little bit more how it works, I think you'll see the answer very clearly. So what ECHO-AIR does is it starts with an emissions change. And so the crucial thing is we have to know how much the emissions are changing in response to any policy.

14:14:33 --> 14:14:36

Joshua Apte, UC Berkeley: That's something that the user has to estimate.

14:14:36 --> 14:14:43

Joshua Apte, UC Berkeley: And once you have an emissions change, then yes, it can tell us, you know, for...

14:14:43 --> 14:14:53

Joshua Apte, UC Berkeley: alternative investments that lead to alternative emission changes, which ones are going to deliver the most health benefits and the most disparity benefits and where?

14:14:53 --> 14:14:58

Joshua Apte, UC Berkeley: So as long as you can estimate the change of emissions, then you can estimate the benefits.

14:14:58 --> 14:15:14

Joshua Apte, UC Berkeley: So I think it is absolutely well suited for this as long as you think you can reliably estimate the emissions from an

incentive. If the incentive all gets pocketed and no emissions change, then that incentive was useless.

14:15:14 --> 14:15:17

Joshua Apte, UC Berkeley: But we don't know that right up front.

14:15:17 --> 14:15:19

Joshua Apte, UC Berkeley: So...

14:15:19 --> 14:15:34

Joshua Apte, UC Berkeley: For that, you need an emissions inventory and you need to make, you know, wise assumptions. And your second question I think was around sort of, you know, what happens in these counterfactual scenarios that you can use ECHO-AIR once you've established what those scenarios are

14:15:34 --> 14:15:41

Joshua Apte, UC Berkeley: to show what would happen under various different scenarios. But it takes as an input the emission change.

14:15:41 --> 14:15:56

Joshua Apte, UC Berkeley: I also just wanted to make sure that one crucial thing got said in response to Jasmine's question previously, which was about community science, which is anybody can use this tool. It's publicly available, it's open already, and it's designed to

14:15:56 --> 14:16:14

Joshua Apte, UC Berkeley: take a lot of the very difficult air quality modeling stuff that normally needs a PhD to do on a supercomputer, allow anybody to run it on their own computer. And so this is something where community groups around the state are actually already using ECHO-AIR for simulating the types of questions that they're interested in.

14:16:14 --> 14:16:26

Joshua Apte, UC Berkeley: And so it's meant to put these questions not just in the hands of academic groups or regulators, but really in this tool in anybody's hand who wants to spend a little bit of time working with it.

14:16:28 --> 14:16:43

Sarah Sullivant | CARB (she/her): Thank you, Josh. So we have just a little bit more time before we need to move on to our second topic. So we'll take the remaining hands, which are Cassie Lopina, Mary Elizabeth, and Kevin Hamilton, and then we will go into public comment.

14:16:43 --> 14:16:45

Sarah Sullivant | CARB (she/her): So I'll hand it over to Cassie.

14:16:45 --> 14:17:00

CG-Cassie Lopina: Hi, thank you. So, I actually have two questions. The first is a clarifying question. I'll start there. I think I missed when this product was produced, and the date that this was completed. Is this new, or is this an older tool?

14:17:04 --> 14:17:07

CG - Paula Torrado, OEHHA: Josh, do you want to respond to that? I don't know.

14:17:06 --> 14:17:13

Joshua Apte, UC Berkeley: Yeah, it was first published in 2024 and we're continuing to work on it,

14:17:13 --> 14:17:15

Joshua Apte, UC Berkeley: refine it under an OEHHA contract.

14:17:15 --> 14:17:32

CG-Cassie Lopina: Fantastic. Thank you. And then my second question is actually directed to CARB, and it's really on the question, the second question that's on the slide on how could it be expanded to support future advocacy.

14:17:32 --> 14:17:47

CG-Cassie Lopina: I was wondering, looking at the agenda today, between this topic and then the air toxics topic that's coming, I think it's really difficult to answer that question without understanding where the CTR reporting regulation is, and how much more refined

14:17:47 --> 14:18:02

CG-Cassie Lopina: emissions data is and what CARB has access to. So I'm wondering if at some point today you could provide clarity and potentially provide an update on that program. It doesn't have to be today, but I think that would be of interest to be able to really answer that question on the screen.

14:18:04 --> 14:18:21

Kevin Olp | CARB (he/him): Yeah, I mean, I would defer to Josh Apte. You know, CTR is getting a lot more expansive. So for everybody, that's the Criterion Toxics Reporting Regulation. It was something we actually developed out of legislation from AB 617 requiring us to gather this additional information.

14:18:21 --> 14:18:38

Kevin Olp | CARB (he/him): And we will talk about it a little bit because it's helpful in gathering information around toxics, especially more refined and nuanced data, as well as from smaller sources. The pipeline of getting that data into what feeds into ECHO-AIR is still a few years away.

14:18:38 --> 14:18:43

Kevin Olp | CARB (he/him): And so I don't know, Josh, if you want to speak to that.

14:18:45 --> 14:19:05

Joshua Apte, UC Berkeley: You know, I can't speak to the pipeline on developing the emissions data, but what I can say is that ECHO-AIR was designed first for PM2.5, but we're actively exploring how to expand it for air toxics as well, given how important understanding which sources cause which exposures cause which health effects is

14:19:05 --> 14:19:16

Joshua Apte, UC Berkeley: for that question as well. ECHO-AIR is probably well suited for a wide set of neurotoxins, but not all. And that's something that's sort of actively under R&D right now.

14:19:17 --> 14:19:24

Kevin Olp | CARB (he/him): we can get you an update to that in writing, as an action item. We'll track that. And Deldi, I see you, as well.

14:19:23 --> 14:19:45

Deldi Reyes, CARB: Yeah, thank you. I just wanted to respond to you quickly, Cassie. Your question is a great bridge to the next topic for our agenda today, which is the toxics roadmap. And our colleagues who run the CTR are in air quality planning and science division. And we're actually, I believe, in the sixth or seventh year of the rollout of CTR.

14:19:45 --> 14:20:01

Deldi Reyes, CARB: Which is very, very good. And it does mean, I think for this group, probably an opportunity to get, you know, an in-depth conversation with our colleagues at AQPSD. I'm sure they'd be happy to come and provide an update when this group feels they're ready for it.

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CG-Cassie Lopina: Thanks, Deldi.

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Sarah Sullivant | CARB (she/her): Thank you.

14:20:08 --> 14:20:13

Sarah Sullivant | CARB (she/her): All right, we have about five minutes left in this portion. I will call on Mary Elizabeth.

14:20:15 --> 14:20:30

CG - Mary Elizabeth: Hi! So I had a few questions, but let me just put the questions out there, you know, for the record, and we can respond to them whenever. So I've discovered this thing called emission reduction credits that are for sale.

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CG - Mary Elizabeth: And there's, like, a listing of, you know, these businesses that have put out there these emission reduction credits, and so I'm wondering if any of those things are included.

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CG - Mary Elizabeth: Next, I appreciate, you know the idea that this could be and should be refined to deal with land use opportunities. And then

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CG - Mary Elizabeth: another thing, you know, that occurred to me along those same lines is, you know, we've got this issue where permits are very high. So you know, the actual emissions are less than what the business is permitted for.

14:21:18 --> 14:21:34

CG - Mary Elizabeth: And so, you know, the business can go ahead and, you know, emit more and extra, you know, than normal. And how can that perhaps be used, you know, to consider, cumulative impacts

14:21:34 --> 14:21:38

CG - Mary Elizabeth: when assigning permit limits.

14:21:38 --> 14:21:56

CG - Mary Elizabeth: the air networks, so I was wondering, you know, about those air networks, are those, just the AB617, air networks, or, you know, does it include those other networks that are out there, like, that are monitoring, fenceline emissions?

14:21:57 --> 14:22:14

CG - Mary Elizabeth: And I know that that's certainly something, you know, that we would like to see more of in Stockton, you know, to directly be able to measure those emissions from our stationary sources.

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CG - Mary Elizabeth: And then the question about a stationary mobile. So when we're doing the emission inventory, so different communities are gonna have different mixes of...

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CG - Mary Elizabeth: stationary, and mobile. And so, I'm just wondering, you know, like, how those emissions are characterized for input in the... in the model.

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CG - Mary Elizabeth: And then a last one here, you know, when I looked at that map of the AB617, you see a lot more communities down in Southern California.

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CG - Mary Elizabeth: And I'm just wondering, you know, how those emission reduction allocations are distributed. So, you know, are they distributed over three miles, distributed over six miles, distributed over the whole state?

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CG - Mary Elizabeth: And so those were the main questions. And so I'll go ahead and stop now. And sorry, I turned my video on, but the camera thing was off, so I just noticed that now. Bye-bye.

14:23:29 --> 14:23:38

CG - Paula Torrado, OEHHA: Thank you, Mary Elizabeth. Maybe we can put together a response to all of the things you mentioned. I don't know about the emissions credits, but we can follow up with you.

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Sarah Sullivant | CARB (she/her): Great. Thank you, Paula.

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CG - Paula Torrado, OEHHA: Thank you.

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Sarah Sullivant | CARB (she/her): Our last hand is Kevin Hamilton.

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CG - Kevin D Hamilton, RRT,ACS: All right, thanks.

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CG - Kevin D Hamilton, RRT,ACS: I guess the main, you know, the concern

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CG - Kevin D Hamilton, RRT,ACS: that I have is attribution of that source of pollution.

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CG - Kevin D Hamilton, RRT,ACS: You know, turn of the century,

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CG - Kevin D Hamilton, RRT,ACS: millions of dollars were spent for CRAPEX and CCOS.

14:24:11 --> 14:24:22

CG - Kevin D Hamilton, RRT,ACS: And it was interesting to find locations of pollution, their actual locations versus what the agencies and permits were demonstrating. Later on

14:24:22 --> 14:24:30

CG - Kevin D Hamilton, RRT,ACS: in a project that we worked on at the beginning of this particular entity, the advisory committee,

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CG - Kevin D Hamilton, RRT,ACS: CCAC at that time, we took on

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CG - Kevin D Hamilton, RRT,ACS: working with the agency, the CARB, to find out

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CG - Kevin D Hamilton, RRT,ACS: whether or not a number of facilities, permitting facilities, or permitted, excuse me, facilities,

14:24:49 --> 14:24:52

CG - Kevin D Hamilton, RRT,ACS: were actually...

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CG - Kevin D Hamilton, RRT,ACS: what they were emitting was matching what they were saying was happening. And we went at it through what ECHO-AIR is doing, which is looking at the paperwork that they're providing.

14:25:02 --> 14:25:05

CG - Kevin D Hamilton, RRT,ACS: The reporting that the individual

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CG - Kevin D Hamilton, RRT,ACS: facility provides, because it's a permitted facility, and it has to turn in. Now, it did create the findings that we had.

14:25:15 --> 14:25:21

CG - Kevin D Hamilton, RRT,ACS: Where of the 30 facilities that communities brought to us across the region

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CG - Kevin D Hamilton, RRT,ACS: that we inspected, all 30 of them had been sort of

14:25:28 --> 14:25:32

CG - Kevin D Hamilton, RRT,ACS: pencil whipping the whole thing. I don't know if you're familiar with that term.

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CG - Kevin D Hamilton, RRT,ACS: But we saw values for equipment emission

14:25:36 --> 14:25:47

CG - Kevin D Hamilton, RRT,ACS: and viability of that piece of equipment matching for 10 year, 12, I think the record was 30 years for one

14:25:47 --> 14:25:54

CG - Kevin D Hamilton, RRT,ACS: company. It was 20 for several of them, where they've been entering exactly the same data every year.

14:25:54 --> 14:26:01

CG - Kevin D Hamilton, RRT,ACS: So, you know, your source has to be investigated for its honesty.

14:26:04 --> 14:26:11

CG - Kevin D Hamilton, RRT,ACS: This system is sort of like a sieve in that respect. Now, we always like to think much of that was corrected.

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CG - Kevin D Hamilton, RRT,ACS: I'm encouraged that this particular tool can look at the facility registry service and can assign a unique ID to each physical facility, and then,

14:26:28 --> 14:26:36

CG - Kevin D Hamilton, RRT,ACS: it says it can at least, cleanly link air, water, and waste data together, for a single property. I would like to see that

14:26:36 --> 14:26:47

CG - Kevin D Hamilton, RRT,ACS: quite honestly. And if there's a demonstration somewhere, I will drive to go watch it and see it happen. If we can get that and get that out there,

14:26:47 --> 14:26:54

CG - Kevin D Hamilton, RRT,ACS: it had enough capacity to be able to, you know,

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CG - Kevin D Hamilton, RRT,ACS: really, get a handle on this in a community, that would be a great thing. So, I'm just not clear...

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CG - Kevin D Hamilton, RRT,ACS: on how this

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CG - Kevin D Hamilton, RRT,ACS: sort of circumvents

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CG - Kevin D Hamilton, RRT,ACS: the industry itself, or the facility itself

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CG - Kevin D Hamilton, RRT,ACS: and how it's reporting what it's doing. In the end, someone has to go in there, look at the equipment, and measure the emissions, and

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CG - Kevin D Hamilton, RRT,ACS: also determine its age and viability. And again, that's what we found was a

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CG - Kevin D Hamilton, RRT,ACS: significant weakness in the whole system, and I'd be interested to know how...

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CG - Kevin D Hamilton, RRT,ACS: ECHO-AIR, you know, bypasses that or changed that.

14:27:44 --> 14:27:59

Joshua Apte, UC Berkeley: Sure, I can answer that question, Kevin. And I think my answer is to do what you're saying, you always need many tools. You have to make measurements to see what's actually happening in the real world, right? So if you don't make measurements to

14:27:59 --> 14:28:04

Joshua Apte, UC Berkeley: track exactly what you're talking about you will miss things.

14:28:04 --> 14:28:05

Joshua Apte, UC Berkeley: On the other hand,

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Joshua Apte, UC Berkeley: you cannot represent the full world with measurements because we can't afford to measure everything everywhere.

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Joshua Apte, UC Berkeley: And so emissions inventories give us our best available estimates for what's happening where, and facilities are an important part of that. But of course, there are also things like

vehicles, and we have to know where the vehicle activity is, how much the vehicle fleet is emitting,

14:28:27 --> 14:28:43

Joshua Apte, UC Berkeley: and all those things. All those combined to make an emissions inventory. So ECHO-AIR is agnostic to the inventory. You can use what the Air District develops, as we have sometimes. You can use what a community group develops if they think they know better. You can use what CARB develops or US EPA.

14:28:43 --> 14:28:52

Joshua Apte, UC Berkeley: Any of those emissions data will get fed into ECHO-AIR. And what ECHO-AIR does is it takes those emissions and simulates where the impact is. So it's trying to ask...

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Joshua Apte, UC Berkeley: and answer this question. If we know what the emissions are,

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Joshua Apte, UC Berkeley: who is impacted where and by how much?

14:28:59 --> 14:29:09

Joshua Apte, UC Berkeley: And once you've got that information, you can go back and say, well, if those numbers aren't adding up, maybe the inventory was wrong and you can go back and correct it.

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Joshua Apte, UC Berkeley: So maybe like...

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CG Co Chair-John Balmes: I want to take the Chair's prerogative just to give a shout out to my colleague at UC Berkeley, Josh Apte.

14:29:18 --> 14:29:28

CG Co Chair-John Balmes: Because, as you can tell, all of you on the call, this is an exposure scientist, one of the best in the world, and I'm not

14:29:28 --> 14:29:42

CG Co Chair-John Balmes: being hyperbolic there, but who also really gets environmental justice. So I've always valued Josh for trying to do the best exposure science he can, but make an impact on

14:29:42 --> 14:29:45

CG Co Chair-John Balmes: communities that really need help.

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CG Co Chair-John Balmes: So thank you, Josh, for being here.

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Joshua Apte, UC Berkeley: Thank you, John.

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CG - Paula Torrado, OEHHA: Yeah, thank you so much.

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Kevin Olp | CARB (he/him): I can just add one more thing to that. Go ahead, Paula.

14:29:52 --> 14:30:08

CG - Paula Torrado, OEHHA: No, I was going to say, yes, it could be the tools of many tools. And when used with, or compared to or with other tools, it can only strengthen what you're mentioning, Kevin. Like, what are the gaps in inspections and enforcement? It can add another layer, another perspective.

14:30:08 --> 14:30:21

CG - Paula Torrado, OEHHA: And to say to you, Kevin, Jasmine, and Mary Elizabeth, happy to do a follow-up on our deep dive in ECHO-AIR, how it works, what we've done, and just share more information about it.

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CG - Kevin D Hamilton, RRT,ACS: So one last quick comment, just want to be sure that we're...

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CG - Kevin D Hamilton, RRT,ACS: answering the question of how ECHO-AIR is utilizing the vast network of community air monitoring

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CG - Kevin D Hamilton, RRT,ACS: that is... has been developed, ...

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CG - Kevin D Hamilton, RRT,ACS: over the last, what, 10 years now? Maybe a little longer. So...

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CG - Kevin D Hamilton, RRT,ACS: I'd like to have that answered as well, and how the entity running ECHO-AIR would be working with those

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CG - Paula Torrado, OEHHA: Mhm.

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CG - Kevin D Hamilton, RRT,ACS: local, community-based organizations that are operating.

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CG - Kevin D Hamilton, RRT,ACS: Those sensors.

14:30:58 --> 14:31:15

Joshua Apte, UC Berkeley: Hey, Kevin. So I know we're a little over time, but I just wanted to extend an open invitation to anybody on this call, including you, to come to Berkeley, have a chat with us, sit down. We can show you how to use it and what it's used for. Or we can meet on Zoom. But to answer your question specifically, Kevin.

14:31:15 --> 14:31:17

Joshua Apte, UC Berkeley: ...

14:31:17 --> 14:31:33

Joshua Apte, UC Berkeley: The modeling world and the measurement world don't live together right now in any part of practice. And so that's not what ECHO-ARI is meant to do. It doesn't use the modeling data. Sorry, it doesn't use the measurement data.

14:31:21 --> 14:31:25

CG - Kevin D Hamilton, RRT,ACS: Oh, I know that.

14:31:33 --> 14:31:40

Joshua Apte, UC Berkeley: Because it's meant to link emissions to exposure estimates.

14:31:40 --> 14:31:51

Joshua Apte, UC Berkeley: Half of my group works on measurements, and so we think all the time about how to combine those things, but that's not what this particular tool is. So, I totally respect the perspective, but it's not the purpose of this tool.

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CG - Paula Torrado, OEHHA: Yep.

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Joshua Apte, UC Berkeley: Hope that's helpful.

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CG - Kevin D Hamilton, RRT,ACS: Thanks, Josh.

14:31:57 --> 14:32:04

Sarah Sullivant | CARB (she/her): Thank you, everyone, for the robust discussion. I'm going to turn it over to Kevin for some final words on this topic before we go to public comment.

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Kevin Olp | CARB (he/him): Yeah, well, first of all, I just, again, want to thank OEHHA and Josh from UC Berkeley for this presentation and sharing the results from this research. It's extremely important, again, for us being able to understand how much this program is achieving our mission.

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Kevin Olp | CARB (he/him): Which is not just removing... reducing emissions, but really making sure to target them, in the most overburdened communities, and

14:32:28 --> 14:32:46

Kevin Olp | CARB (he/him): I think it was heartening to see the results are showing that. But the question is asked about what types of analyses we can do and how we can utilize tools like this we're going to continue to explore. So I'm excited to say that in our next study session, we'll be having a part two, which is going to be led by our research division.

14:32:46 --> 14:33:03

Kevin Olp | CARB (he/him): And they're going to be sharing about their health model as well. And we're going to learn about different research they're doing on endpoints, different health endpoints, like Jasmine was talking about that are important, to measure around respiratory health and neurological health.

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Kevin Olp | CARB (he/him): And so looking forward to continuing this conversation in our next study session. With that, I'll pass it back to you, Sarah.

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Sarah Sullivant | CARB (she/her): Great. Thank you so much, Kevin.

14:33:15 --> 14:33:24

Sarah Sullivant | CARB (she/her): Alright. So we will now have a public comment portion related to this topic where members of the public will be able to raise their hands in Zoom.

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Sarah Sullivant | CARB (she/her): if time remains after public comments are closed, we'll give the Consultation Group members and CARB staff an opportunity to very briefly respond. As I mentioned, we're a little bit over time, and we want to make sure that we get to our next topic.

14:33:38 --> 14:33:46

Sarah Sullivant | CARB (she/her): For members of the public, when it's your turn, the host will ask you to unmute, and after you push the unmute button, you may begin to speak.

14:33:46 --> 14:33:59

Sarah Sullivant | CARB (she/her): We are giving public commenters 3 minutes. There is a timer up on the screen. We will let you know if any changes happen as time progresses, but I think we're planning to give 3 minutes.

14:33:59 --> 14:34:01

Sarah Sullivant | CARB (she/her): So you'll see that timer.

14:34:01 --> 14:34:08

Sarah Sullivant | CARB (she/her): When you're unmuting, if you're on the phone, if star six doesn't work to unmute, we can unmute you from our end.

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Sarah Sullivant | CARB (she/her): Please, we appreciate you staying on mute until it's your turn to speak, so we can be respectful of everyone's turn.

14:34:15 --> 14:34:21

Sarah Sullivant | CARB (she/her): And a reminder to please state your name and affiliation so we all know who is speaking.

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Sarah Sullivant | CARB (she/her): So with that, I'm going to start with

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Sarah Sullivant | CARB (she/her): Ms. Margaret Gordon.

14:34:31 --> 14:34:34

Sarah Sullivant | CARB (she/her): I believe I've asked you to unmute, Ms. Margaret.

14:34:33 --> 14:34:36

Ms.Margaret Gordon: Hello? Can you hear me?

14:34:34 --> 14:34:37

Sarah Sullivant | CARB (she/her): Yes, we can hear you.

14:34:36 --> 14:34:40

Ms.Margaret Gordon: All right. Hello, I'm Ms. Margaret Gordon.

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Ms.Margaret Gordon: I am the former

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Ms.Margaret Gordon: Executive Director of the West Oakland Environmental Indicators Project, and a co-founder. Now I'm the chair of the board.

14:34:51 --> 14:34:56

Ms.Margaret Gordon: My comments about the ECHO-AIR

14:34:56 --> 14:35:02

Ms.Margaret Gordon: system is that I'm somewhat disappointed that it didn't break down

14:35:02 --> 14:35:05

Ms.Margaret Gordon: by regions of conditions.

14:35:07 --> 14:35:23

Ms.Margaret Gordon: What measurements that you, or instruments that you use in the agricultural community is not the same you use in logistics and goods movement. And it's not the same thing when you use in refineries. I was in hopes that this was going to be broke down

14:35:23 --> 14:35:32

Ms.Margaret Gordon: based on conditions per community. In the Bay Area, there are nine counties.

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Ms.Margaret Gordon: Each one of those counties have a different type of condition. I was in hope that this ECHO-AIR

14:35:39 --> 14:35:54

Ms.Margaret Gordon: model was going to break down to support people understanding how do they look, how these conditions are being reduced in such a way that you obviously

14:35:54 --> 14:36:08

Ms.Margaret Gordon: had an action plan, including with some of the communities who are AB617. But I didn't hear that, and I didn't see that, that it was broke down to just the most

14:36:08 --> 14:36:20

Ms.Margaret Gordon: refinement as possible. And I feel as though when you bring these models, you're supposed to have models based on the conditions per community. You cannot

14:36:20 --> 14:36:35

Ms.Margaret Gordon: establish one size fit all. And I heard that from Paula. This is not about one size fit all, but somewhere in the model, it has to show how you are progressing the individual tools to support the individual conditions.

14:36:36 --> 14:36:52

Ms.Margaret Gordon: And if we don't have that, we're looking at one size fit all, and that is not fair to individual communities. Yes, you are using a tool of the census tract, but the census tract does not cover

14:36:52 --> 14:37:07

Ms.Margaret Gordon: all the emissions exposure issues are. Nothing was in this presentation to look at cumulative impacts. It didn't even talk about how to engage local government or permitting about these issues.

14:37:07 --> 14:37:10

Ms.Margaret Gordon: So we need to have a much more refined

14:37:10 --> 14:37:24

Ms.Margaret Gordon: ECHO-AIR system that look at all these details, and, and to the minute process of educating everyone. It's right now, it's just so, it just, just does not connect the dots for me.

14:37:27 --> 14:37:29

CG - Paula Torrado, OEHHA: Thank you, Ms. Margaret.

14:37:27 --> 14:37:29

Sarah Sullivant | CARB (she/her): Thank you, Ms. Margaret.

14:37:29 --> 14:37:31

CG - Paula Torrado, OEHHA: Can I respond really quickly?

14:37:29 --> 14:37:40

Sarah Sullivant | CARB (she/her): Paula, both... we're gonna go through all of the public comments first. If you could hold your response, Paula, that would be super helpful. We just want to make sure we have time for public comments, and then I'll give you an opportunity to respond. Is that okay?

14:37:39 --> 14:37:40

CG - Paula Torrado, OEHHA: Yep.

14:37:40 --> 14:37:43

Sarah Sullivant | CARB (she/her): Thank you so much. Thank you, Ms. Margaret.

14:37:43 --> 14:37:47

Sarah Sullivant | CARB (she/her): The next person, we have Leonard Seitz.

14:37:45 --> 14:37:49

Ms.Margaret Gordon: Ms. Ms. Ms. Margaret.

14:37:48 --> 14:37:52

Sarah Sullivant | CARB (she/her): Ms, I'm sorry, Ms. Margaret, thank you for the correction.

14:37:50 --> 14:37:53

Ms.Margaret Gordon: Not M-I-S-S, M-S.

14:37:52 --> 14:37:55

Sarah Sullivant | CARB (she/her): Ms. Margaret, thank you.

14:37:56 --> 14:38:00

Sarah Sullivant | CARB (she/her): All right. Leonard Seitz, I'm going to ask you to unmute.

14:38:07 --> 14:38:11

Leonard Seitz: Okay. Well, Leonard Seitz and,

14:38:11 --> 14:38:15

Leonard Seitz: I work for Caltrans, but I don't speak for Caltrans.

14:38:15 --> 14:38:26

Leonard Seitz: I wanted to mention that many decades ago, there was a lot of work on photochemical modeling of ozone.

14:38:26 --> 14:38:28

Leonard Seitz: And an emissions model

14:38:28 --> 14:38:39

Leonard Seitz: bringing together EMFAC and transportation modeling assignment files was developed to

14:38:39 --> 14:38:45

Leonard Seitz: estimate emissions by grid cell or by link, tens of thousands of them.

14:38:47 --> 14:39:02

Leonard Seitz: They're producing emissions inventory for motor vehicles or for photochemical modeling, and seems what Josh is asking for, an emissions inventory, could be satisfied by that model if it is

14:39:02 --> 14:39:04

Leonard Seitz: revamped.

14:39:05 --> 14:39:09

Leonard Seitz: If anybody has an interest in it

14:39:09 --> 14:39:12

Leonard Seitz: contact me.

14:39:12 --> 14:39:14

Leonard Seitz: And we can go from there.

14:39:16 --> 14:39:24

Leonard Seitz: That's leonard.seitz@dot.ca.gov.

14:39:27 --> 14:39:29

Sarah Sullivant | CARB (she/her): Thank you very much for your comment.

14:39:31 --> 14:39:36

Sarah Sullivant | CARB (she/her): I don't believe we have any additional hands raised from the public.

14:39:37 --> 14:39:39

Sarah Sullivant | CARB (she/her): So, oh.

14:39:39 --> 14:39:46

Sarah Sullivant | CARB (she/her): I'm seeing one more hand that I believe will be the last hand

14:39:46 --> 14:39:49

Sarah Sullivant | CARB (she/her): that we will take. Charles McCaw.

14:39:49 --> 14:39:53

Sarah Sullivant | CARB (she/her): I'm going to allow you to talk and ask to unmute.

14:39:53 --> 14:39:55

Charles McCaw: Yes.

14:39:55 --> 14:39:57

Charles McCaw: Can you hear me?

14:39:56 --> 14:39:57

Sarah Sullivant | CARB (she/her): Yes.

14:39:57 --> 14:40:04

Charles McCaw: Yes, I am appreciative of the work that CARB and OEHHHA does, but I must say I am not...

14:40:04 --> 14:40:11

Charles McCaw: convinced that this particular model, the ECHO-AIR model, has the specificity to

14:40:11 --> 14:40:22

Charles McCaw: fine-tune and tell us what's going on in a specific... in a specific community. I heard that it was maybe good to 1 kilometer. I'm in Los Angeles, and I am...

14:40:22 --> 14:40:29

Charles McCaw: with the United Homeowners Association. We recently just wrapped up a SNAPS

14:40:29 --> 14:40:39

Charles McCaw: monitoring of the air quality near the Inglewood oil field. I live near to that. We're pretty sure that we have a good idea of what the air quality is

14:40:39 --> 14:40:56

Charles McCaw: from almost at the ocean all the way to central Los Angeles, and that's very predictive of health. I'd point out that the PM2.5 across the board is lower than the OEHHA critical limit. Now, that doesn't say people aren't gonna be negatively impacted on it.

14:40:56 --> 14:41:02

Charles McCaw: The value is something like 600, 600 to 700 people.

14:41:03 --> 14:41:13

Charles McCaw: per million people per 70 years will experience cancer. So the question is, with your monitoring, how are you going to improve that?

14:41:13 --> 14:41:26

Charles McCaw: And it's not clear to me. And I'm also troubled that the model doesn't take into account... I think I saw something that says it doesn't take into account measurement data. That's what I'm concerned about. And someone mentioned about attribution of source data.

14:41:26 --> 14:41:29

Charles McCaw: And it seems to me that...

14:41:29 --> 14:41:46

Charles McCaw: It's not clear to me how that's gonna impact my community. Also, I don't wanna give the wrong impression, but it's good to improve health impact, but by how much? I mean, are you gonna improve it by six months? I mean, are you gonna improve it by three months?

14:41:46 --> 14:41:48

Charles McCaw: You know, improve the life

14:41:48 --> 14:42:00

Charles McCaw: span of people in these communities by a significant fraction. If it's just going to be 1 or 2 months or 3 months, yes, it's an improvement, but surely we could be looking at other ways to improve

14:42:02 --> 14:42:17

Charles McCaw: their health outcomes. Things like better access to better medicines, better access to hospitals, better jobs. I'm one of the people that believe that California is killing jobs. Better access to jobs is better access to health care, so it's a

14:42:17 --> 14:42:26

Charles McCaw: significant... It's a complicated picture. And I'm thinking that maybe second order effects might not be what you want.

14:42:26 --> 14:42:28

Charles McCaw: Thanks.

14:42:29 --> 14:42:31

Sarah Sullivant | CARB (she/her): Thank you for your comments.

14:42:32 --> 14:42:43

Sarah Sullivant | CARB (she/her): At this time, that concludes our public comment portion. I'll turn it back over to the Consultation Group and our presenters. I believe, Paula, you had a response.

14:42:43 --> 14:43:01

CG - Paula Torrado, OEHHA: Yes. Yeah. Thank you, Sarah. So Ms. Margaret Gordon, thank you for your comments. Thank you for participating in the meeting. You mentioned breaking it down by region. The tool can do that. So it can break down by regions. It actually works best at the state comparison level, evaluating trends by regions.

14:43:01 --> 14:43:12

CG - Paula Torrado, OEHHA: And as you mentioned, you're right, local conditions are very different. So what it can't do at the moment is look at community by community, but it can look at evaluating trends by regions.

14:43:12 --> 14:43:27

CG - Paula Torrado, OEHHA: And it can also break down by sources. So that's something... that's information we currently have and we can share with the Consultation Group and also with you directly because it can look at that. I know you also mentioned cumulative impacts and the tool can look at racial equity analysis,

14:43:27 --> 14:43:42

CG - Paula Torrado, OEHHA: it doesn't look at cumulative impacts, but it considers, things like CalEnviroScreen, the low priority, sorry, the priority populations definitions by CARB, so other things. So what we're presenting today is what the tool can do currently

14:43:42 --> 14:43:57

CG - Paula Torrado, OEHHA: and what it could do in the future. So thank you for your suggestions, because that's what we wanted to hear from you, where the tool can go further to support 617 goals, the mission of 617, and other advocacy goals.

14:43:57 --> 14:44:12

CG - Paula Torrado, OEHHA: Leonard, I think you mentioned something about the emissions revamp. I'm not sure about that, but we can definitely follow up. And then lastly, Charles McCaw, thank you for sharing that you have that information on SNAPs and Inglewood and air monitoring. ...

14:44:12 --> 14:44:29

CG - Paula Torrado, OEHHA: Definitely the one kilometer grid is something we mentioned as a limitation of ECHO-AIR. And the goal for this presentation is, or for the ECHO-AIR for now, is to share another layer, another perspective that can help identify where priorities can go, where strategies can be strengthened because they are working

14:44:29 --> 14:44:43

CG - Paula Torrado, OEHHA: at the sort of state, regional level. And... and we can... we can follow up with you more regarding the... the specific aspects that you mentioned on, jobs, health access, and air monitoring measures. Thank you.

14:44:44 --> 14:44:46

Sarah Sullivant | CARB (she/her): Thank you, Paula.

14:44:44 --> 14:45:01

Joshua Apte, UC Berkeley: I wanted to also respond to Ms. Margaret's comment.

14:44:46 --> 14:44:47

CG - Paula Torrado, OEHHA: Yes, please.

14:44:47 --> 14:44:49

CG - Paula Torrado, OEHHA: Please do.

14:45:01 --> 14:45:09

Joshua Apte, UC Berkeley: And thanks so much, Ms. Margaret, for your question. I wanted to clarify that ECHO-AIR really can show you how different communities with different profiles of sources are different in terms of what sources are driving their exposure. Here's one little example that I'm sharing here from a paper we did on vehicles only. This is showing sort of the differences

14:45:09 --> 14:45:25

Joshua Apte, UC Berkeley: that different communities experience from different types of vehicles, but simply cars versus trucks. And what we see is that among the different AB 617 communities around the state, the relative impacts of cars versus trucks on PM 2.5 is actually really quite different.

14:45:25 --> 14:45:42

Joshua Apte, UC Berkeley: And ECHO-AIR can really tease out those differences community by community, exactly like you're suggesting. I think that's very important. Where I would not take this is down to the city block level or down to the particular neighborhood level, because that's just too fine to ask of your emissions inventory.

14:45:42 --> 14:45:58

Joshua Apte, UC Berkeley: And of your air quality model. And I'd point out that very few state modeling tools would ever get that fine right now. So ECHO-AIR does give a lot of power to tell about how different sources impact different communities. And I think I agree with you that that's an important thing that we need for EJ

14:45:58 --> 14:46:02

Joshua Apte, UC Berkeley: prioritization in the state. So thanks.

14:46:03 --> 14:46:05

Sarah Sullivant | CARB (she/her): Thank you, Josh.

14:46:03 --> 14:46:18

Hye-Youn Park, OEHHA: Oh, one last thing that Leonard Seitz mentioned some Caltrans impact model. And actually, we are also using CARB's impact model for our mobile source modeling, this modeling approach as well.

14:46:18 --> 14:46:29

Hye-Youn Park, OEHHA: But we'd love to talk to you about your data in the future. And then, lastly, Mr. Charles McCaw from Southern California. I can hear your point.

14:46:29 --> 14:46:42

Hye-Youn Park, OEHHA: However, our ECHO-AIR tool is more around the total PM, not air toxics per se. And so that's something we are really interested in developing, reduced modeling for air toxic.

14:46:42 --> 14:46:57

Hye-Youn Park, OEHHA: That's still novel and new at the moment. And also, you mentioned some health care accessibility, that kind of information. Yes, that's totally true. But in this work, scope of work is very limited, the PM and relevant health.

14:46:57 --> 14:47:09

Hye-Youn Park, OEHHA: But again, that's beyond our scope. That's something we want to maybe challenge ourselves in the future, but that's not included in the model. But that's a really good

14:47:09 --> 14:47:18

Hye-Youn Park, OEHHA: point that everyone has to think about the healthcare accessibility and implementation. Thank you for your comments.

14:47:18 --> 14:47:30

Sarah Sullivant | CARB (she/her): Thank you, Hye-Youn. We've had some really great discussion on this. We do have a second topic that we need to get to. So, CARB folks, anything else before we move on to the next topic?

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Kevin Olp | CARB (he/him): Nope.

14:47:33 --> 14:47:35

Sarah Sullivant | CARB (she/her): All right.

14:47:36 --> 14:47:39

Sarah Sullivant | CARB (she/her): So if we get the slides pulled back up.

14:47:40 --> 14:47:56

Sarah Sullivant | CARB (she/her): Originally, we had talked about taking a brief break here. We are behind schedule, and we want to make sure that there's enough time for this discussion. So we are going to continue to move forward. But I want to acknowledge that this is a very long meeting. If you need to step away, please take care of yourself.

14:47:56 --> 14:48:08

Sarah Sullivant | CARB (she/her): we are recording this, and of course, are always open to your comments. So with that, I'm going to turn it over to Kevin to kick us off into our second topic.

14:48:09 --> 14:48:18

Kevin Olp | CARB (he/him): Thanks so much, Sarah. And I'm going to try to go through these slides pretty quickly so we have plenty of time for the discussion in the end. So next slide.

14:48:19 --> 14:48:31

Kevin Olp | CARB (he/him): So today we're going to be talking about the air toxics, CARB's air toxics roadmap, which I'm excited to introduce today. But before we do that, I do want to provide just a little bit of background and context.

14:48:31 --> 14:48:50

Kevin Olp | CARB (he/him): So, first of all, why are we talking about this today? Well, throughout AB617, the statute, you will see over and over the references to toxic air contaminants and criteria pollutants, and every single time you'll see toxic air contaminants is listed first. And there's a real priority in terms of how do we reduce

14:48:50 --> 14:49:03

Kevin Olp | CARB (he/him): those sources of toxics contributing to human health in the most overburdened communities across the state. An airborne toxic is just any chemical that can become airborne and is known to have a health impact.

14:49:03 --> 14:49:21

Kevin Olp | CARB (he/him): And that known is important because something isn't classified as a toxic air contaminant until it goes through a formal process as established by the Office of Environmental Health and Hazard Assessment to actually formally identify and register those chemicals. And there's roughly 200 compounds on that

14:49:21 --> 14:49:23

Kevin Olp | CARB (he/him): list currently.

14:49:23 --> 14:49:32

Kevin Olp | CARB (he/him): We also wanted to mention emerging air toxics because these are, chemical compounds that we may have known had some,

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Kevin Olp | CARB (he/him): health impact, but not previously, for example, known its carcinogenicity or other types of health impacts. And so we are recently detecting and reviewing old chemicals and establishing whether or not they have health standards for

14:49:50 --> 14:50:08

Kevin Olp | CARB (he/him): cancer risk. So, for example, in mid-May, OEHHA released information on draft inhalation unit risk findings for acrolein and ethylene oxide, which we estimate now are significant drivers of total cancer risk in California.

14:50:08 --> 14:50:23

Kevin Olp | CARB (he/him): But before we are certain about what those levels are, we're going through this draft process, taking in feedback, and once that draft IUR is made final, then we can begin to characterize it as a source and then regulate it.

14:50:24 --> 14:50:42

Kevin Olp | CARB (he/him): And the reason that air toxics are so important from a local exposure standpoint is this is on the level that we do the work here in CARB. Which is, we're not trying to look at regional contributions to air pollution, we're really trying to understand those facilities that, because of their proximity, those

14:50:42 --> 14:51:04

Kevin Olp | CARB (he/him): roads and wildfires and other sources, proximity to communities most contribute to health. And air toxics by definition are a proximity-based risk, so the closer you are to sources of air toxics, the greater your chance of exposure and the known health effects of those. And so when we do reduce air toxics, we are making sure that we're benefiting

14:51:04 --> 14:51:18

Kevin Olp | CARB (he/him): places that disproportionately have a greater share of those burdens because of historical racial segregation and the pattern of moving a lot of communities into places that are near these sources of air toxics. Next slide.

14:51:20 --> 14:51:35

Kevin Olp | CARB (he/him): So this is actually the language in AB 617 that establishes that CARB needs to create a Consultation Group. And it's worth noting that this body exists inside of a provision to develop an air toxics reduction program.

14:51:35 --> 14:51:53

Kevin Olp | CARB (he/him): The statute directly states that we should be cutting toxic air contaminants in the high cumulative exposure communities, and that statewide strategy is the Blueprint that we, through the work that we're doing in the Consultation Group, will be informing the update of in October 2028.

14:51:53 --> 14:52:12

Kevin Olp | CARB (he/him): And you can see the legislature named the Consultation Group partners pretty plainly: the Scientific Review Panel on Toxic Air Contaminants, the districts, OEHHA, Environmental Justice organizations, and industry. And so each of you, in a different way, has some experience working on air toxics and reducing air pollution to protect communities. And so...

14:52:12 --> 14:52:25

Kevin Olp | CARB (he/him): your perspectives on this conversation today are really important because a lot of the work you're doing is how do we protect human health, how do we protect our most vulnerable communities, especially from air toxics. And...

14:52:25 --> 14:52:41

Kevin Olp | CARB (he/him): I think what you also see in this slide is that our mission is very similar to that of the Toxics Roadmap. It says to create a statewide strategy to reduce emissions of toxic air contaminants and criteria pollutants in communities affected by a high cumulative exposure burden.

14:52:41 --> 14:52:51

Kevin Olp | CARB (he/him): And I think you'll hear from the presentation on the toxics roadmap, has a very similar mission. So this is a really ripe conversation for this group to be having today. Next slide.

14:52:55 --> 14:53:14

Kevin Olp | CARB (he/him): So I briefly just want to mention some of the different, things that AB617 created that are tools in our toolkit for addressing impacts from air toxics. The first thing that we have listed on here Cassie helpfully pointed out in the previous conversation, which is the criteria and toxics reporting regulation.

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Kevin Olp | CARB (he/him): Which CARB

14:53:16 --> 14:53:31

Kevin Olp | CARB (he/him): promulgated and will require many more smaller sources to report, but also requiring all sources to report an expanded list of chemicals and processes so that we have a more nuanced and granular understanding of the risk of air toxics that

14:53:31 --> 14:53:46

Kevin Olp | CARB (he/him): each facility emits in communities. We also... AB617 required us to develop the Technology Clearinghouse, which we have established that has Air District rules, as well as best available control technology designations for

14:53:46 --> 14:53:52

Kevin Olp | CARB (he/him): the types of controls that are needed to reduce people's exposure to air toxics.

14:53:52 --> 14:54:07

Kevin Olp | CARB (he/him): We also... it established community air monitoring, which the districts have developed community air monitoring plans and implemented them to measure VOCs like acrolein and ETO and benzene, as well as metals like lead, arsenic

14:54:07 --> 14:54:25

Kevin Olp | CARB (he/him): and Chrome 6. It also established the creation of the Blueprint, which established our Community Emission Reduction

Programs. Which, all of the plans in different ways are actually reducing people... are focused on reducing people's exposure to air pollution and especially air toxics.

14:54:25 --> 14:54:30

Kevin Olp | CARB (he/him): On our next slide, we actually have quite a few examples of how that's happening in action.

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Kevin Olp | CARB (he/him): And next slide.

14:54:33 --> 14:54:35

Kevin Olp | CARB (he/him): Sorry, I buried it in there.

14:54:36 --> 14:54:38

Kevin Olp | CARB (he/him): No, back.

14:54:39 --> 14:54:41

Kevin Olp | CARB (he/him): Can you go one slide back?

14:54:45 --> 14:54:49

Michelle Byars - CARB: Sorry, it keeps skipping on me.

14:54:49 --> 14:54:51

Kevin Olp | CARB (he/him): No worries.

14:54:53 --> 14:54:54

Michelle Byars - CARB: Not sure what's happening.

14:55:05 --> 14:55:07

Michelle Byars - CARB: There it goes.

14:55:05 --> 14:55:08

Kevin Olp | CARB (he/him): There it is. Thank you. Thanks, Michelle. Sorry.

14:55:07 --> 14:55:08

Michelle Byars - CARB: Took a while to load.

14:55:08 --> 14:55:27

Kevin Olp | CARB (he/him): No worries. So I think this just gives a few different examples of air toxics in communities, and the things we're doing to address them. So, for example, in West Oakland, I think a lot of people are aware there's a large metal recycler that has been documented to be producing a large amount of lead emissions that are entering into West Oakland and the community.

14:55:27 --> 14:55:44

Kevin Olp | CARB (he/him): We've also seen in Portside; the Community Air Monitoring Plan has been measuring reductions in VOCs like acrolein and benzene over multiple years. We've seen pesticides, which is a toxic air contaminant.

14:55:44 --> 14:55:57

Kevin Olp | CARB (he/him): That has made its way into a lot of CERPs, and the advocacy in places like Arvin/Lamont and Shafter have led to the funding of a program, Spray Days, to help notify communities and reduce people's exposure to those toxic air contaminants.

14:55:57 --> 14:56:13

Kevin Olp | CARB (he/him): On an ongoing basis, the San Diego Air Pollution Control District is supporting community with monitoring around the Tijuana River, where there are high levels of hydrogen sulfide being emitted, and they've handed out almost 6,000 air filtration units to

14:56:13 --> 14:56:19

Kevin Olp | CARB (he/him): assist residents in being able to reduce the impacts indoors from those emissions.

14:56:19 --> 14:56:36

Kevin Olp | CARB (he/him): we've seen in South Coast Air Quality Management District, with South LA really prioritizing auto body shops. They created two rules that helped to phase out the use of PCBTF out of those facilities to directly address the community's concern from

14:56:36 --> 14:56:51

Kevin Olp | CARB (he/him): those facilities that are very prevalent in those neighborhoods. Currently, we can see in Richmond, North Richmond, San Pablo, the Air District is implementing a strategy to update rulemakings around flaring from oil and gas refineries.

14:56:51 --> 14:57:06

Kevin Olp | CARB (he/him): Also, in South Coast, we've seen examples of monitoring and enforcement around ethylene oxide to make sure facilities are reducing and monitoring the amounts of that chemical from entering into the community. So...

14:57:06 --> 14:57:22

Kevin Olp | CARB (he/him): Reducing air toxics has always chiefly been a focus of the work that we do through our emission reduction programs. And this conversation is so timely today because we've been doing the work that you will see quite a bit in the next presentation. And I think a lot of you have really good advice

14:57:22 --> 14:57:30

Kevin Olp | CARB (he/him): that we want to hear from you in the discussion about how this program can inform some of the lessons of their toxics roadmap implementation.

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Kevin Olp | CARB (he/him): We're also looking forward to having conversation to see how we can leverage this effort to support the work that we're doing through our program to reduce people's exposure to harmful air toxics. So, looking forward to this conversation, I'll turn it back over to Sarah to introduce our primary presentation.

14:57:47 --> 14:58:04

Sarah Sullivant | CARB (she/her): Thanks so much, Kevin. So today, as we've said, our topic is the roadmap to reduce air toxics. And we have staff here from another CARB division, so Transportation and Technology, I believe. And we will hand it over to Matt O'Donnell.

14:58:04 --> 14:58:25

Matthew O'Donnell, TTD: Yeah, hi there. My name is Matthew O'Donnell. I'm the Chief of the Risk Reduction Branch in the Transportation and Toxics Division. I want to thank you very much for having us here today to hear about the roadmap and give us this opportunity to share information about it with you. I'd also like to point out the fact that I have one of my other colleagues is joining me today, Dr. LaShaye Cobley,

14:58:25 --> 14:58:32

Matthew O'Donnell, TTD: who is the manager of our risk analysis section and has been the very capable lead on the development of the roadmap.

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Matthew O'Donnell, TTD: I want to give you a little bit of background, a little history about why it is that we decided to take this action now, why we decided to create this roadmap to reduce air toxics. So if I'm sharing information with you that you're already familiar with, I apologize in advance.

14:58:49 --> 14:58:59

Matthew O'Donnell, TTD: But back in 2000, our board adopted the diesel risk reduction plan.

14:58:59 --> 14:59:09

Matthew O'Donnell, TTD: And when they did that, we really focused our efforts where toxics are concerned on the reduction of exposure to diesel particulate matter.

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Matthew O'Donnell, TTD: And that meant really redirecting internally a lot of our staff and a lot of resources to focus on DPM. And although we've been very successful at reducing DPM throughout the state, that has meant that

14:59:25 --> 14:59:39

Matthew O'Donnell, TTD: many of those resources that were redirected haven't been available to us for focusing on literally all of the other things. And internally, we kind of refer to everything but diesel as non-diesel toxics, simply because there was that major separation

14:59:39 --> 14:59:55

Matthew O'Donnell, TTD: internally where we're concerned and that dividing line. So we're really intending on refocusing ourselves back on non-diesel toxics and trying to bring about the same kinds of emissions reductions that we were able to accomplish

14:59:55 --> 15:00:13

Matthew O'Donnell, TTD: where DPM is concerned. What you're seeing now on the screen is basically the outline of the roadmap. These are the major

sections of the roadmap. I'll be talking about the three middle. But we will talk about, first of all, a quick introduction. There's a fair amount of information there, a little bit of background that I just gave you.

15:00:13 --> 15:00:28

Matthew O'Donnell, TTD: But also other information that's worthwhile reading. The document itself is not that long, roughly 39 pages. So it's not a terribly long document, but it spells out, first of all, why we chose to act now,

15:00:28 --> 15:00:34

Matthew O'Donnell, TTD: why this point in time, and why it is that we need to do this. And then we spell out

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Matthew O'Donnell, TTD: what it is we need to do to accomplish this. In order to be successful at reducing non-diesel toxics, what do we need to do? And, you know, how do we bring that about? And then there is a section called Next Steps, where we talk about our intended first early action items

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Matthew O'Donnell, TTD: and then sort of near-term goals thereafter. So those are the things that I'll be talking about today. So next slide, please.

15:01:03 --> 15:01:20

Matthew O'Donnell, TTD: So a little bit of this is going to be a repeat of what Kevin just talked about. It was a very capable introduction, by the way. Thank you very much, Kevin. So the thing that had focused us, aside from this fact that we have been sort of not really truly away from non-diesel toxics but

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Matthew O'Donnell, TTD: hadn't been focusing the same level of resources that we had in the past. So in the 26 years since the adoption of the Diesel Risk Reduction Plan, there still have been a number of things that have been going on. So communities have obviously been regularly advocating for themselves, saying, we need you to be involved in this. We need you to reduce

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Matthew O'Donnell, TTD: our exposure to toxics. We need you to get involved. So that's always been there and always been driving us to do more. We have since then, or since the adoption of that roadmap, also had some addition, some changes to

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Matthew O'Donnell, TTD: our reporting requirements, which were also talked about earlier, and they are the CTR and the EICG. The EICG,

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Matthew O'Donnell, TTD: the acronym's not really as important as knowing, that that is the... that's the regulation that we maintain that spells out the list of toxic compounds that have to be reported under 2588.

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Matthew O'Donnell, TTD: and they've been... that... that particular regulation was revised to add about a thousand additional compounds, that need to be reported, but it also changed some of the reporting requirements that meant that we now have quite a few more facilities that are required to report. So it's an additional number of

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Matthew O'Donnell, TTD: compounds, but also additional facilities. So we have a lot more information coming in.

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Matthew O'Donnell, TTD: That information or that regulation has phased in dates. So each year a new number of facilities have to report with a new number of compounds.

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Matthew O'Donnell, TTD: We have then, as has already been stated, the fact that OEHHA has been also active in either adopting or revising cancer IURs

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Matthew O'Donnell, TTD: for several compounds. And the three that, that were already mentioned are, PCBTF, acrolein, and ETO. so we have new, new values on how toxic those compounds are.

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Matthew O'Donnell, TTD: So that information combined with additional monitoring or monitoring information. We have mobile monitoring efforts that have been happening throughout the state. We also have additional monitoring that's being provided by local community groups that are monitoring toxics in their own communities.

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Matthew O'Donnell, TTD: And then combining that with sort of cumulative exposure analyses that we've done. The one that Kevin had on his first slide, the CATA analysis, provides us with sort of a statewide

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Matthew O'Donnell, TTD: analysis of, sort of most important or the highest emitted toxic compounds in the state. So we get an idea then of what is happening throughout the state from in terms of toxics exposure.

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Matthew O'Donnell, TTD: But as Kevin mentioned too, and has been said by several speakers, toxic exposure is very much a local phenomenon. So CATA only gives us so much because of its resolution. We need to do more to understand what's going on at the community level.

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Matthew O'Donnell, TTD: All of this then leads to what Kevin was talking about. That is this notion of these emerging toxics, these compounds that are not necessarily new compounds.

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Kevin Olp | CARB (he/him): Oh, Matt, I think somebody muted you. I'm sorry about that. I don't know what happened there.

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Matthew O'Donnell, TTD: Oh, okay, did someone... okay, can you guys hear me now?

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Kevin Olp | CARB (he/him): Yes.

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Sarah Sullivant | CARB (she/her): Yes.

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Steven Weiss: Just go back 10, 15 seconds.

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Matthew O'Donnell, TTD: Okay, sorry about that.

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Matthew O'Donnell, TTD: Okay, no problem. So all of this information combined is really leading us to understand more about what's really driving risk, what we need to focus on. So we're calling these compounds emerging toxics of concern. They aren't necessarily new compounds.

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Matthew O'Donnell, TTD: They're not — it's not that they're recently discovered. It's just that they've been there all along and our understanding of either how much is being emitted, by whom, or how toxic those compounds are is changing.

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Matthew O'Donnell, TTD: Our shift is... our need to focus on these compounds and our need to return to this space is what's really driving our need for this particular document to explain this to our board. And that's what the document is supposed to do.

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Matthew O'Donnell, TTD: To explain to our board and to the public that we need to return to this space, and this is what we need to do to be successful.

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Matthew O'Donnell, TTD: So for the next slide, I'll talk a little bit about what we feel we need to do to be successful.

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Matthew O'Donnell, TTD: So you'll notice that the first two of these focal points, or these two steps in the process, are really focused on relationships and communication and engagement.

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Matthew O'Donnell, TTD: It is relationships with our, with the air districts. And that's important because the air districts are really the folks who implement many of our toxics regulations. And they're really important partners in this whole process. We also have other state agencies that that have authority

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Matthew O'Donnell, TTD: over toxics in the state, and we need to work closely with them to coordinate our efforts and understand what they're doing. They have different ways of approaching reducing toxics that can be very helpful. So if we work closely with them, we may be able to bring about reductions more rapidly than we could by ourselves.

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Matthew O'Donnell, TTD: And then, of course, we also need to work closely with all of you. With community groups, with actually anybody who has some influence over this whole process or has an understanding of what's going on at community levels. There's only so much that we can know without working closely with you and understanding from you

15:06:52 --> 15:06:59

Matthew O'Donnell, TTD: what you're dealing with. So our building relationships with community groups and with other stakeholders is going to be extremely important to us.

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Matthew O'Donnell, TTD: A few of these things are... they're fairly, ... I'll go over them at a high level; there's a lot of detail that you can look at in the document itself. But strengthening our scientific foundations is really important to us, because we know that we're going to be challenged.

15:07:12 --> 15:07:27

Matthew O'Donnell, TTD: And we're being challenged on a number of different fronts by different groups. So we know that we have to have a solid scientific foundation for any decisions that we make and any changes that we propose. So we talk about the importance

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Matthew O'Donnell, TTD: of improving both the quantity and quality of our emissions inventory, and also things like emissions factors. So there's an emphasis on source testing and some monitoring, obviously, modeling, as Josh has said.

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Matthew O'Donnell, TTD: Modeling and monitoring are two things that need to go hand in hand and don't typically happen in that way.

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Matthew O'Donnell, TTD: All of that will help us to prioritize all of these emerging toxics that we're talking about. Finding the toxics that are driving risk in each community and then focusing on reducing exposure to those toxics.

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Matthew O'Donnell, TTD: We know also that that that information is only as good as the as it is available. So transparency is going to be extremely important throughout this whole process. The process will be long, and we'll talk a little bit at the end about what we mean by this process.

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Matthew O'Donnell, TTD: But, you know, we want to make sure that we share all of the information that we have

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Matthew O'Donnell, TTD: with all of, you know, all the community groups, all the public, so that they can use that information first to know what it is we're saying is happening, what their exposures are, but also to advocate for themselves and be informed when we have conversations about what we need to do next.

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Matthew O'Donnell, TTD: The next are things that we need to do. The last two or three are things that we need to do, that we know we need to do. I don't want to get into too much of the detail, but there's some things that can be done to modernize the existing programs that could help to

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Matthew O'Donnell, TTD: shorten time spans. Because we know that reducing emissions takes a long time if we go the traditional route, so we need to figure out ways to do that more rapidly and more efficiently.

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Matthew O'Donnell, TTD: The notion of cumulative impacts has been brought up in this conversation, which I think is really important. We are definitely going to focus on developing our own policies and procedures

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Matthew O'Donnell, TTD: for doing a cumulative air impacts analysis. And it's important that I emphasize the air there. You know, when we talk about cumulative impacts and cumulative impacts analysis, it could have a number of different definitions. But we're going to be focusing on really, you know, reducing or understanding

15:09:41 --> 15:09:59

Matthew O'Donnell, TTD: what's going on in communities. If you don't know what a community is facing, what they're being exposed to, there's no way to really make a plan for how to reduce that. So we're going to be focusing on developing policies and procedures for doing air impacts analysis, cumulative air impacts analysis.

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Matthew O'Donnell, TTD: You know, one of the things, you know, is that when I was talking with Kevin before all of this,

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Matthew O'Donnell, TTD: you know, what we were talking about, too, is that there is a very close connection between 617 and all of this work that we're proposing. 617 is very much...

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Matthew O'Donnell, TTD: The benefits that can come from 617 are very much a function of how much we can reduce community exposure to toxics in particular. So whenever any of you are working with local groups and you're developing

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Matthew O'Donnell, TTD: CERPS, or, you know, new monitoring plans, an emphasis on monitoring and reducing toxics is going to be very helpful. So we're going to want to work closely, obviously, with Kevin and his staff, with Deldi and her staff when it comes to

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Matthew O'Donnell, TTD: you know, making sure that toxics is a good time. Or is it, sorry, is part of your focus.

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Matthew O'Donnell, TTD: So next slide, please.

15:11:00 --> 15:11:19

Matthew O'Donnell, TTD: So, as far as... so that's why we're... why we're doing this, what we need to do in order to be successful at this. These are the things that we intend to do as soon as the board adopts the roadmap. And we'll be taking the roadmap to the board in November.

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Matthew O'Donnell, TTD: So two early action items is a real focus on partnership engagement. We really need to be sure that we are talking to everyone who can help us in this process, who can provide us useful information and useful input.

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Matthew O'Donnell, TTD: That includes everybody that I've already talked about. And then we already have begun and will continue to develop statewide plans for acrolein and ETO. PCBTF will likely be next

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Matthew O'Donnell, TTD: where those statewide plans are concerned. And then after those, those are our immediate goals. And then in the near term, as I said, improve our air toxics inventory and then focus on cumulative health risk, cumulative air impacts.

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Matthew O'Donnell, TTD: And then we're also developing something we're calling the Toxic Decision Framework, which is just a method that will

help us to identify the toxics that have the greatest effect on health in each community, and then can help to focus us on what we need to do

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Matthew O'Donnell, TTD: to reduce the impacts of those compounds in your communities.

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Matthew O'Donnell, TTD: So, last slide, if you would, please.

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Matthew O'Donnell, TTD: this is just a quick timeline of what's... of where we are. We released the document on the 12th. We had a public workshop on the 25th. There are actually two public comment periods associated with this

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Matthew O'Donnell, TTD: roadmap. We opened one the day that we released the document on August 12th and that will close on September 16<sup>th</sup>. And then with every time we take a non reg item to our board there is always a formal, for lack of a better term,

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Matthew O'Donnell, TTD: 30-day comment period, which will open 30 days before November 9th. So October 9th to November 9th. We're not differentiating those comments. We'll treat all of the comments and questions that come to us

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Matthew O'Donnell, TTD: through those public comment documents exactly the same. So the formal document, or the formal comment period, doesn't get more weight. And then finally, we'll be taking this document to our board on November 19th.

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Matthew O'Donnell, TTD: We encourage everyone that's interested in attending that board meeting and providing public comment, if you're so inclined. If you want to find out more about the roadmap

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Matthew O'Donnell, TTD: and any of the supporting information you can see that website there. If you go there, you'll find the roadmap itself, plus our workshop notices and all of the associated information that goes along with

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Matthew O'Donnell, TTD: taking this to our board.

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Matthew O'Donnell, TTD: So I know it was a very quick overview. So I just wanted to go ahead and move on to the questions.

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Matthew O'Donnell, TTD: And then see if any of you have any questions. So I'll turn it back to Kevin for

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Matthew O'Donnell, TTD: this portion.

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Kevin Olp | CARB (he/him): Alright. Thanks, Matt. Thanks so much for your presentation. So we have these three questions today. Just first wanting to make sure people answer any questions you have about the presentation because it did have a lot of technical items. And then again, that's sort of two broad discussion

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Kevin Olp | CARB (he/him): topics we'd love to hear back from you all on are. First, what lessons we have learned through this program implementation that can strengthen CARB's implementation of the roadmap moving forward. But also, again, as we showed, since there's such a natural overlap between the mission of the Toxics Roadmap and the work we're doing

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Kevin Olp | CARB (he/him): through the Community Air Protection Program, which roadmap commitments should Blueprint 3.0 explicitly reinforce

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Kevin Olp | CARB (he/him): to guide our program work? So...

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Kevin Olp | CARB (he/him): Looking forward to this discussion and at any time if you have a question or comment, just use your hand to indicate so.

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Matthew O'Donnell, TTD: Yeah, Dr. Balmes.

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Sarah Sullivant | CARB (she/her): And then, yep, go ahead.

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Matthew O'Donnell, TTD: Yeah.

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Charles McCaw: Was that me? Oh, okay. Yes.

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CG Co Chair-John Balmes: No, I think it's me.

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Charles McCaw: Right. I.

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CG Co Chair-John Balmes: Oh.

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Sarah Sullivant | CARB (she/her): Sorry, that was Dr. Balmes. We're still doing the Consultation Group portion, and we will go into public comment after we wrap the Consultation Group discussion.

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Sarah Sullivant | CARB (she/her): Go ahead, Dr. Balmes.

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CG Co Chair-John Balmes: Well, thank you. Thank you, Kevin and Matt, for your presentations. And I just want to say something that I think my co-chair

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CG Co Chair-John Balmes: Diane Takvorian, and also a fellow board member, may agree with.

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CG Co Chair-John Balmes: We really, as board members, want to take what the Consultation Group has to say about the toxics roadmap to the board meeting in November. So we're...

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CG Co Chair-John Balmes: I'm just saying, we really, really want your thoughts now, and you can send thoughts that you might have after this meeting

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CG Co Chair-John Balmes: to us as well. Because this is

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CG Co Chair-John Balmes: very important to have the Consultation Group weigh in on the toxics roadmap.

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CG Co Chair-John Balmes: Thanks.

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Sarah Sullivant | CARB (she/her): Thank you, Dr. Balmes. Diane Takvorian.

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CG Co Chair-Diane Takvorian: So great minds, of course, think alike. And I agree with Dr. Balmes' statement and

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CG Co Chair-Diane Takvorian: just to add that I, you know, I think the board in general is really interested and

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CG Co Chair-Diane Takvorian: you know, appropriately excited about this this topic. And know that it's critically important to our communities. So it. But it's also new.

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CG Co Chair-Diane Takvorian: So, as Matt talked about, we have been focused on diesel quite a bit, and climate, and we need to, you know, kind of pivot in a certain way. So I think this... CARB staff, thank you all for the

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CG Co Chair-Diane Takvorian: excellent presentation, and for the workshops that you've been having. I think it's really helping us to get a clear assessment of where we are and where we can go with it. But I think I really value the members of this group as well, and the public that

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CG Co Chair-Diane Takvorian: kind of pays attention to 617 communities, and really want to be sure that Dr. Balmes and I are doing the best job we can in representing what the Consultation Group's perspective is, and how it, how we can

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CG Co Chair-Diane Takvorian: improve the work.

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CG Co Chair-Diane Takvorian: So you know, from my perspective, I think that our workshops are really important, and listening sessions are really important. What's really important, too, is how we adjust the work of the staff and the board in order to reflect the priorities of the public.

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CG Co Chair-Diane Takvorian: So that's... I don't expect our projects to be unchanged as they go to the to the board. I think that's a sign of

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CG Co Chair-Diane Takvorian: a collaborative working environment that's, that I hope will be... is a hallmark of CARB. And so I know staff want to hear that. I know all of us want that to really have a through line from here

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CG Co Chair-Diane Takvorian: to the board. So, let's not think about the staff presentation as a done deal. I think it's a beginning. It's a beginning step, it's a collaborative offer, and I hope we'll all take them up on it. So, thank you so much.

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Sarah Sullivant | CARB (she/her): Thank you for your comments. Next hand we have is Cassie Lopina.

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CG-Cassie Lopina: Good.

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CG-Cassie Lopina: Hi, so, again, a clarifying question, and then a more pointed question. So, on the third element, the roadmap commitments and

Blueprint 3.0, does that include the commitment by CARB to develop new airborne toxic control measures?

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Matthew O'Donnell, TTD: Yeah. Hi, Cassie. Good to see you again. So yes, the short answer is yes. The issue that I'm sure many of you are aware of is the development of an ATCM, an airborne toxic control measure, is lengthy.

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Matthew O'Donnell, TTD: It takes typically minimum 4 to 5 years from beginning to end to develop an ATCM. And the issue with ATCMs, at least currently, is that they tend to be very focused on one or two pollutants from a single source category.

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Matthew O'Donnell, TTD: The point being, it doesn't bring about change as quickly as needed or as a lot of people would really like, and that's very understandable. So there will be an emphasis on developing new ATCMs, specifically where they

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Matthew O'Donnell, TTD: can do the best, you know, where they can, where they can bring about the greatest amount of reduction. But we've also committed in the roadmap to developing other emissions reduction strategies. And we just, we've used, we use that term as sort of a catch-all term.

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Matthew O'Donnell, TTD: And that is yet to be decided. What those other emissions reduction strategies will be isn't defined in the roadmap. But we know that we have to do something to bring about changes more quickly, wherever possible, by whatever means possible. So it's not the only thing we intend to do,

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Matthew O'Donnell, TTD: but we will be continuing to develop new ATCMs.

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CG-Cassie Lopina: And I guess, thanks, Matt, that was really helpful. And as a follow-up, I guess, recommendation on this, I think looking across the various programs that CARB is working on implementing right now, this information, I think, is very timely, so I recommend putting out

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CG-Cassie Lopina: as much information as possible about the types of sources that are emitting the highest impacting toxics, and then the types of technologies and controls that could potentially be utilized to eliminate or significantly reduce those emissions.

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CG-Cassie Lopina: I think that it's extremely important, especially with the recent adoption of the manufacturing decarbonization incentive under Cap and Invest. Those funds could go to industrial sources, and I think

awareness of the types of technologies and how that funding could be used to actually benefit technologies

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CG-Cassie Lopina: could be really, really important.

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Matthew O'Donnell, TTD: Yeah, thank you for the comment. Appreciate it. Yeah.

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Sarah Sullivant | CARB (she/her): Great. Thank you so much for the comments. Next hand I see is Dr. Charisma Acey.

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CG alt-Dr. Charisma Acey: Thank you so much for the

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CG alt-Dr. Charisma Acey: presentation. I just have a few comments, and unfortunately, I have to go to class to teach but thank you for the presentation. I think the question... a few questions that I had were, whether...

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CG alt-Dr. Charisma Acey: Like how this this roadmap relates to the AB 617 process and

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CG alt-Dr. Charisma Acey: you know, the 20 or so plans that have already identified,

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CG alt-Dr. Charisma Acey: different hazards and priorities, and whether community-identified toxics from existing CERPs are formal input into the plan, or whether the list that emerges from this roadmap is something that

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CG alt-Dr. Charisma Acey: Community Steering Committees need to be engaged with. Kind of which way the information flows.

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CG alt-Dr. Charisma Acey: I was also wondering, I was happy to hear about cumulative impacts being considered, and a plan being developed under this. That's definitely a concern, and I think Ms. Margaret raised it earlier.

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CG alt-Dr. Charisma Acey: One other question I had was the prioritization method for the toxics in this roadmap. There's mention of toxics posing the greatest risk,

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CG alt-Dr. Charisma Acey: but just what does that mean in terms of, is it risk to expose individuals or populations, or is it by disparity or community-identified concerns? Each of those might rank

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CG alt-Dr. Charisma Acey: the greatest risk differently. So I was just wondering if that was going to be very clear in the roadmap. And then, lastly, I was just going to bring up a governance piece, because I think the roadmap is really a multi-scale governance instrument

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CG alt-Dr. Charisma Acey: working at the state level, across the air districts, local governments, the...

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CG alt-Dr. Charisma Acey: AB 617 Community Steering Committees, as well as tribes. And

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CG alt-Dr. Charisma Acey: our roles and decision-making authority specified in the toxics roadmap. And just would recommend there be a governance chapter as part of this document, and not only a technical chapter. Thank you.

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LaShaye Cobley, TTD: Yeah, I have, oh, is that okay, Matt, for me to jump in?

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Matthew O'Donnell, TTD: Okay. No, no, go right ahead, yeah.

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LaShaye Cobley, TTD: just a couple of things about the roadmap that I think ties into all of the four pieces that you laid out. One is that it's a really high-level collaborative document. It's really guiding where we're to go, and it is aspirational. And so it's really just pointing to the fact that we need to strengthen our science, strengthen our policy, and strengthen our

15:24:28 --> 15:24:51

LaShaye Cobley, TTD: relationships with all of the different players who have a stake in air quality. And so the details of this specific compound or that specific compound isn't really there outside of acrolein and ETO, given the new health values. And so when it comes to things like the toxic decision framework, that is one way that we are showing how we will process, in the future, different compounds of concern. So all the different

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LaShaye Cobley, TTD: stakeholders that you mentioned and the different

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LaShaye Cobley, TTD: things that they would prioritize is a part of building the framework itself. How do we set standard criteria and rank

those criteria? That will come through things like the decision framework. So the roadmap, high level, says there's this process that is to come, the details will follow during implementation,

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LaShaye Cobley, TTD: to answer that component of it. And then in terms of governance, in building the roadmap we've worked with the Air Districts, CAPCOA, we worked with the Department of Toxic Substance Control, OEHHA, DPR. And it's our way of sort of signaling and agreeing and starting pathways of like how we can continue to work together. And even with

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LaShaye Cobley, TTD: community groups, as we like, reach out during workshops to say how can we start building all the necessary relationships so that implementation can run more smoothly.

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LaShaye Cobley, TTD: I hope that touches all of the things that you listed out.

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CG alt-Dr. Charisma Acey: Thank you.

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Kevin Olp | CARB (he/him): Thanks, LaShaye. And I just want to add to that, Dr. Acey.

15:25:53 --> 15:26:13

Kevin Olp | CARB (he/him): You know, in terms of what it means for our program moving forward, I think it's a real opportunity that CARB is going to be centrally prioritizing toxics as an area to invest resources to better characterize and advance our understanding of, so that in those instances where we do see human health risks that are

15:26:13 --> 15:26:30

Kevin Olp | CARB (he/him): not acceptable that we can actually regulate those. And so I think hopefully what we'll see over time is a lot of focus on how we use air monitoring plans to speciate different VOCs and metals. you know, looking at how we're controlling individual toxics that might be

15:26:30 --> 15:26:46

Kevin Olp | CARB (he/him): elevated in some communities versus others. Developing emission reduction plan strategies that are really trying to directly reduce those source risks in communities. And so I think also, as we've mentioned

15:26:46 --> 15:27:06

Kevin Olp | CARB (he/him): the Criteria and Toxics Reporting Regulation is moving forward. We've developed the Technology Clearinghouse, and we also have a lot of other tools in our toolkit in AB617, and just trying to use these resources in concert to contribute to the overall effort to reduce the risk from toxics, especially in those 19 selected communities and future selected communities through our program.

15:27:08 --> 15:27:10

CG alt-Dr. Charisma Acey: Thank you.

15:27:11 --> 15:27:16

Sarah Sullivant | CARB (she/her): Thank you for the discussion. The next hand I see is Paula Torrado.

15:27:17 --> 15:27:34

CG - Paula Torrado, OEHHA: Thank you, Sarah. So just two things. What are the things? I think this was the consideration of a co-governance is, for the prioritization, what can be done for more proactive engagement to not just prioritize

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CG - Paula Torrado, OEHHA: but what's of importance in the community with the information that you already have from AB 617 communities, from air grants,

15:27:41 --> 15:27:56

CG - Paula Torrado, OEHHA: in terms of prioritization of air toxics and informing the hotspots program so that it's linked to enforcement and action. And what I mean by the proactive engagement is asking the communities first, is this of importance? Does this matter right now?

15:27:56 --> 15:28:12

CG - Paula Torrado, OEHHA: And what is the pathway for action? And that needs to be more clearly said in the Toxics, I know it's a roadmap, but more clearly state where the proactive engagement is at, in which stages, how can they inform the decision making for the prioritization. And then

15:28:12 --> 15:28:28

CG - Paula Torrado, OEHHA: what's next for the action-oriented component in enforcement, for the local districts, and clearly lay out the roles for those different entities, including OEHHA for the hotspots program. Because I think that's important for connecting back to metrics.

15:28:28 --> 15:28:44

CG - Paula Torrado, OEHHA: What is this Toxics Roadmap getting at? How are we prioritizing with which criteria? And are we meeting the goals of enforcement? So that's one part. And then the other is like, what is the fast-tracked EJ prioritization format that we can embed in the Toxics Roadmap?

15:28:44 --> 15:28:48

CG - Paula Torrado, OEHHA: I mean, fast tracked with

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CG - Paula Torrado, OEHHA: an environmental justice priority goal for this. This is of importance for us because of this reason. Maybe it's auto body shops, VOCs, I don't know. But it could be different components for different AB 617 communities. And if it is fast tracked

15:29:03 --> 15:29:11

CG - Paula Torrado, OEHHA: with an environmental justice priority, then measure the engagement and then the action-oriented component.

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CG - Paula Torrado, OEHHA: Thank you.

15:29:14 --> 15:29:31

Matthew O'Donnell, TTD: Yeah, I'll take at least the last half of your comment. And as LaShaye was saying, the roadmap is a very high-level document. It's intended really to focus or to explain that this is where we are now, this is what we want to be able to do in the future, and this is how we get there.

15:29:31 --> 15:29:50

Matthew O'Donnell, TTD: And it's always been really exciting whenever we give a presentation like this to a group like yourselves, because all of you are really interested in the details, and really interested in helping us work through those details. Which is exciting to hear, because all of the input is going to be very valuable to us

15:29:50 --> 15:30:10

Matthew O'Donnell, TTD: as we... as we go through the implementation process on this. the... the details that you're talking about are things that we... that we will be working out, in... as we implement the roadmap, the... the intentions that are outlined in the roadmap. so the... there's really no set detail in the roadmap saying that this is what we intend to do.

15:30:10 --> 15:30:26

Matthew O'Donnell, TTD: We really will be working with everyone as closely as we possibly can to develop those specific details about how we're going to, you know, or how we're going to go about prioritizing, for instance. You know, the program or the

15:30:27 --> 15:30:42

Matthew O'Donnell, TTD: project that we have right now to develop that prioritization methodology is still in its infancy, and we'll be looking for a lot of input. So every time we talk, each one of these things that we're talking about, whether it's the prioritization of compounds or whether it's how we develop emissions reduction strategies,

15:30:42 --> 15:30:56

Matthew O'Donnell, TTD: in every step along the way, we intend to engage with you, our state partners, with community groups, with as many people as we can, to help understand the best way to approach those

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Matthew O'Donnell, TTD: solutions, and bring about the changes that have to happen. But the point of the roadmap is simply to say, we know we need to...

15:31:06 --> 15:31:18

Matthew O'Donnell, TTD: we need to get back into this space, we need to really dedicate, resources to... to... to finding solutions to, non-diesel toxics issues, and that's what we're doing.

15:31:18 --> 15:31:34

Matthew O'Donnell, TTD: We're focusing ourselves now, and we're saying that publicly. And as LaShaye said, it's an aspirational document. We know that there are things that we are saying in the roadmap that we want to accomplish that we can't accomplish with our current staffing levels. We just don't have the staff to do it.

15:31:34 --> 15:31:50

Matthew O'Donnell, TTD: But we know we have to. We've got to find a way to do it. We either need to find a way to find more staff, or we need to find a way to do it with the staff that we have. But we know that right now we can't do it. But if we don't say it, if we don't say that we're going to do it, and we don't aspire to do that, it's never gonna happen.

15:31:50 --> 15:32:04

Matthew O'Donnell, TTD: So, again, a lot of what you're talking about is really important, and it's going to be important in the implementation, and we'll definitely be reaching out to all of you and all of the other people that we know are stakeholders in this process to help us

15:32:04 --> 15:32:06

Matthew O'Donnell, TTD: work through all of those details.

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Matthew O'Donnell, TTD: So I know I didn't answer the second, or your first part of your question. So I hope, did I answer the second part?

15:32:10 --> 15:32:31

CG - Paula Torrado, OEHHA: Yeah, you did. You did. And I wanted to add - thank you. That's helpful. I know that this is an aspirational document, inspirational too. But I wonder if there's a way to activate it more immediately, like case scenarios. Because you already have - we already have a lot of AB 617 data, community protection programs data

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CG - Paula Torrado, OEHHA: where you can activate it in the sense of this community. Like South LA, for example. They're looking at auto body shops. Something that can... So you can start bite-sizing what you already have as aspirational to something that can be groundtruthed

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Matthew O'Donnell, TTD: Mm-hmm, mm-hmm, m.

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Matthew O'Donnell, TTD: Yeah.

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CG - Paula Torrado, OEHHA: with the community itself. Like you, that your team goes to South LA, partners with OEHHA on hotpots. Like something

that can be bite-sized, parallel to, you know, moving forward with the aspirational document.

15:32:59 --> 15:33:14

Matthew O'Donnell, TTD: Yeah, I appreciate it. Yeah, actually, all of those things are things that we'd love to do. I would say that if any one of you are interested in coming to the board meeting when we present this item in November and saying these things to the board

15:33:14 --> 15:33:28

Matthew O'Donnell, TTD: we'd love that. We'd love to hear from you. We'd love to have that information shared with the board. it, it, for two reasons. One, it helps, I think, to, to, helps everyone to understand the, the, the amount of work

15:33:28 --> 15:33:46

Matthew O'Donnell, TTD: that we're faced with. The amount of resources that are going to need to accomplish this, and the importance of accomplishing it. And, you know, and it also helps others to understand what your perspective is, what you can bring to the table, and it shows the kind of level of enthusiasm that all of you have for...

15:33:46 --> 15:34:03

Matthew O'Donnell, TTD: I don't want to take credit for this. It makes it sound like the roadmap is somehow the thing that's going to make this happen. It's not. It's only going to happen if we're working together. It's only going to happen if we can work closely with you and we can coordinate our efforts and we can bring about those changes.

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CG - Paula Torrado, OEHHA: Mhm.

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Matthew O'Donnell, TTD: It'll be the result of work that goes well beyond, you know, CARB's toxics staff. it's gonna be the result of coordinated efforts and... and cooperation. So, it's... it's... that's... that would be really helpful, not only for the board to hear, but for the community to hear, for...

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CG - Paula Torrado, OEHHA: Yeah, thank you.

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Matthew O'Donnell, TTD: for the broader public to hear.

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CG - Paula Torrado, OEHHA: Yeah. Thank you, Matthew.

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LaShaye Cobley, TTD: I just want to add really briefly. So if I'm hearing your question correctly, Paula, you're saying, how do we link data and information that we have more to action? And this answer is going to be not satisfactory, but essentially, I think one of the strengths of the roadmap is that we're trying to figure out

15:34:38 --> 15:34:57

LaShaye Cobley, TTD: how to put processes in place so that runs more smoothly. Because right now, things are very ad hoc, right? It's like, oh, this is the... a chemical that's getting its 15 minutes of fame, how do we all scramble and address that thing? Whereas the roadmap is saying, how can we put processes in place? How can we have standard criteria for evaluating what actions get triggered with

15:34:57 --> 15:35:15

LaShaye Cobley, TTD: different information that comes in. And how do we have public consensus about what do we do, right? Because there's always going to be the questions of, like, well, how toxic is it? How many people is it affecting, right? Like, all of these different people have different questions or criteria that matters more to them, and through the decision framework, that's our way of saying, how do we have standard criteria?

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LaShaye Cobley, TTD: How do we all have consensus on that criteria? And how does that criteria then lead to specific actions that we agree on that is within CARB's jurisdiction?

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CG - Paula Torrado, OEHHA: Yeah.

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LaShaye Cobley, TTD: Unsatisfying, but I hope that that gets at how we're linking, you know, to action.

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CG - Paula Torrado, OEHHA: No, no, that's helpful.

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Matthew O'Donnell, TTD: Yeah.

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CG - Paula Torrado, OEHHA: Yeah, yeah, thank you. And I think.

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Matthew O'Donnell, TTD: Yeah, and that goes back to Dr.

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CG - Paula Torrado, OEHHA: Yeah, and I think you're in the... Go ahead.

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Matthew O'Donnell, TTD: No, no, no, okay, I.

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CG - Paula Torrado, OEHHA: No, I was going to say, this is the right space to do it. What I said last is that maybe you can do that parallel. That aspirational effort versus the bite-sized projects that gets you buy-in, that gets you support,

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Matthew O'Donnell, TTD: Mm-hmm, mm-hmm.

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CG - Paula Torrado, OEHHA: that gets you, "we're behind this project long term," but also you're showing something right now, right? Because you're saying, you're right, it's scattered 15 minutes of fame. Or maybe not 15 minutes. ETO, it's been like, you know, 15 years, but also it's important, right? And I think showing that success

15:36:01 --> 15:36:04

Matthew O'Donnell, TTD: Yeah, yeah, yeah. Mm-hmm.

15:36:07 --> 15:36:13

CG - Paula Torrado, OEHHA: or metrics that you're doing something currently parallel to building this big effort would be important.

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Matthew O'Donnell, TTD: Yeah, I think, you know, what LaShaye is saying, too, is, you know, it goes back to Dr. Acey's question, too, is, you know, what about these other criteria that could be used in ranking? We need to take those into account too. I didn't wanna gloss over that.

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Matthew O'Donnell, TTD: It's not gonna be just the technical toxic exposure extension. It's going to be a lot; it's going to have to include everything. And what we really want to come out with in the end of that, when we create that decision framework, is a decision-making framework that everyone agrees to. So, you know, each of us is going to have our own interest, you know, and our own concern about this particular toxic, but

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Matthew O'Donnell, TTD: if we have a methodology that we all agree to when we analyze a particular toxic compound, and we identify the path that we're going to take to reduce those emissions for that particular compound, that everybody agrees that we made

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Matthew O'Donnell, TTD: that decision in the correct way. So that's really one of the big focuses of that project as well. So I just wanted to make sure to add that.

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Sarah Sullivant | CARB (she/her): Thank you, everyone. So we are running short on time for this topic before we move on to public comment. So I saw two more hands raised, Kevin, then Jasmine. So I'm going to go to Kevin.

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CG - Paula Torrado, OEHHA: Thank you.

15:37:29 --> 15:37:38

CG - Kevin D Hamilton, RRT,ACS: Hi again. This is great work. I'm really glad to hear that you're getting this moving.

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CG - Kevin D Hamilton, RRT,ACS: This particular target has been

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CG - Kevin D Hamilton, RRT,ACS: very difficult to bring to heel over the years. One of the very first things that I would say you would want to do is talk to

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CG - Kevin D Hamilton, RRT,ACS: the AB617 advisory committees.

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CG - Kevin D Hamilton, RRT,ACS: The one in the Valley, for instance, is a group of all of the 617 grantees who've formed this advisory committee. In fact, the first thing they ever took on was

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CG - Kevin D Hamilton, RRT,ACS: inventorying their communities for toxic waste emitters,

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Matthew O'Donnell, TTD: Mhm.

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CG - Kevin D Hamilton, RRT,ACS: air toxic emitters, and working with CARB

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CG - Kevin D Hamilton, RRT,ACS: to learn more about that and understand the system better. So I think they're a great resource for you, I think, and it's where you should start. They've been working on the ground on this for a long time

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CG - Kevin D Hamilton, RRT,ACS: and have identified facilities that they'd really like to have assessed.

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CG - Kevin D Hamilton, RRT,ACS: The other piece is, you know, there are several other agencies that touch this particular

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CG - Kevin D Hamilton, RRT,ACS: problem. DTSC and DPR jump to mind.

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CG - Kevin D Hamilton, RRT,ACS: I sit on the EJAC for DTSC. It would make sense to me that...

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CG - Kevin D Hamilton, RRT,ACS: You said you need more staff. They're talking about very similar types of things. It might behoove you to reach out

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CG - Kevin D Hamilton, RRT,ACS: and see if you've got allies there, to help sort of punch up your work,

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CG - Kevin D Hamilton, RRT,ACS: which you say is understaffed, and I understand that completely. I'd hate to see it die simply because there's not enough people to do the work.

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CG - Kevin D Hamilton, RRT,ACS: So spread the love around there and see what they think.

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CG - Kevin D Hamilton, RRT,ACS: Okay.

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CG - Kevin D Hamilton, RRT,ACS: That's about it. Thank you, though. I appreciate it.

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Matthew O'Donnell, TTD: Okay, yeah.

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Matthew O'Donnell, TTD: Yeah, no, thank you for your comment. And we actually - we have reached out to DPR and DTSC and OEHHA in the development of this document.

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Matthew O'Donnell, TTD: And it's been interesting too because we've interacted with them as well in certain situations that had nothing to do with the roadmap, but that had to do with toxics. Because each of those state agencies has different authority under health and safety code and has different tools that they can use to bring about emissions reductions.

15:40:02 --> 15:40:18

Matthew O'Donnell, TTD: And that's something, too, that we really need to take advantage of too. If we can't do it in a particularly timely manner, maybe one of them can. And so there's that component of it, which I absolutely agree with you on that.

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Matthew O'Donnell, TTD: And the other is, you know, more often than not, when we go out and talk to community groups, they expect us to be coordinated as state agencies, to have talked to one another, which is a completely reasonable thing to expect.

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Matthew O'Donnell, TTD: but it's not something that happens nearly as often as it should. So that's another, you know, area of focus that, that we want to make sure that we, that we bring about change. so that we are

more coordinated with our, with our sister agencies when it comes to what's going on in a community and, and being able to provide

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Matthew O'Donnell, TTD: information to community as you know, coordinated agencies.

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Sarah Sullivant | CARB (she/her): Great. Thank you so much, everyone.

15:41:00 --> 15:41:06

Sarah Sullivant | CARB (she/her): Jasmine, I've seen your hand up and then back down, so I just want to make sure you didn't have any additional questions or comments.

15:41:07 --> 15:41:17

CG-Jasmine Beltran: I'm sorry, I just got tired of waving my hand up in the air, so I kept putting it down. I just wanted to make a comment about

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CG-Jasmine Beltran: the monitoring. Community monitoring. And

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CG-Jasmine Beltran: how inspection triggers and neighborhood level data platforms could drive the immediate enforcement rather than relying solely on delayed regional emission models. So I guess that's a little bit of everything you guys already said.

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CG-Jasmine Beltran: So.

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Sarah Sullivant | CARB (she/her): Great. Thank you, Jasmine. Go ahead, Kevin.

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Kevin Olp | CARB (he/him): Yeah, I can...

15:41:44 --> 15:41:48

Matthew O'Donnell, TTD: Yeah, yeah, no, thank you. I appreciate that. Yeah, I'm sorry, Kevin, do you wanna...?

15:41:47 --> 15:42:04

Kevin Olp | CARB (he/him): Yeah, thanks, Jasmine. We, you know, through the Community Air Grants, we are a big funder of community air monitoring systems and making sure that there is that capacity with local communities to measure their own air quality is critical. That's something that's

15:42:04 --> 15:42:23

Kevin Olp | CARB (he/him): in the DNA of our program. We do want, you know, we do work actively with each of our grantees and make sure that, through our liaisons, they can raise a notification if they see a high level of an emission source. And then, you know, when those things

happen, we do flag it for the district, and we will look into those issues.

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Kevin Olp | CARB (he/him): I think, in general, we want to make sure that people are using our complaint system to highlight any concerns, if they have data or information. And I think you will see both our monitoring and laboratory division, as well as our enforcement division, are very responsive to community concerns and community data. So, we need to make sure that those pipelines

15:42:42 --> 15:43:00

Kevin Olp | CARB (he/him): continue to work quickly because the nature of air quality issues are very ephemeral, and being able to measure and validate data to take enforcement is critical. So, I think that is one of the components of the program we're always constantly trying to figure out, and I appreciate you highlighting that as a concern.

15:43:01 --> 15:43:17

CG-Jasmine Beltran: One last thing also. Maybe incorporating the first responders, like the firefighters, the LA Fire Department. They also have technology that is, like, advanced that could also help with

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CG-Jasmine Beltran: finding the pollutants. And also too, you know, have that relationship with them also. Because I think it's important for them

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CG-Jasmine Beltran: to have some of the information that we have, and then vice versa.

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Kevin Olp | CARB (he/him): So, unfortunately, because of events that have happened in South Coast, including the wildfires, the recent warehouse fire in Boyle Heights, I think those relationships between the Air District and local emergency responders are definitely things that have been prioritized and are being strengthened through that work. But it is critical

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Kevin Olp | CARB (he/him): when there are emergency events for us all to be communicating. Absolutely.

15:43:59 --> 15:44:06

Sarah Sullivant | CARB (she/her): Great. Thank you, everyone, for the robust discussion. We are now going to move into the public comment portion.

15:44:07 --> 15:44:25

Sarah Sullivant | CARB (she/her): So during this portion, as with previous, the previous topic, members of the public will be able to raise their hands in Zoom. If time remains after public comments are closed, we'll give the Consultation Group members, presenters, and CARB staff an opportunity to briefly respond to comments.

15:44:25 --> 15:44:32

Sarah Sullivant | CARB (she/her): So when it's your turn, we'll ask you to unmute, and after you'll be able to press the unmute button, you'll be able to speak.

15:44:32 --> 15:44:39

Sarah Sullivant | CARB (she/her): Reminder that everyone gets three minutes to speak. We'll let you know if that changes based on time.

15:44:39 --> 15:44:51

Sarah Sullivant | CARB (she/her): We also appreciate you staying on mute until it's your turn to speak, to be respectful of everyone's turn. And please remember to state your name and affiliation so that we know who is speaking.

15:44:53 --> 15:44:57

Sarah Sullivant | CARB (she/her): All right. Looking at our queue here.

15:44:58 --> 15:45:01

Sarah Sullivant | CARB (she/her): Thank you for pulling up our timer.

15:45:03 --> 15:45:05

Sarah Sullivant | CARB (she/her): I believe,

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Sarah Sullivant | CARB (she/her): Charles McCaw, we have your hand up, and I'm going to ask you to unmute.

15:45:12 --> 15:45:15

Charles McCaw: Can you guys hear me now?

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Sarah Sullivant | CARB (she/her): Yes.

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Charles McCaw: Good.

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Charles McCaw: Unfortunately, I'm not getting a warm and fuzzy feeling about the ability of you guys to accomplish anything. I'd like to

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Charles McCaw: thank Paula,

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Charles McCaw: I don't want to mispronounce your last name. Are you sure you're with OEHHA? Because you seem to be very focused on activity and getting things done, right? I think you have the right attitude. We need boots on the ground, we need

15:45:41 --> 15:45:50

Charles McCaw: focus on the specific pollutants in the particular areas, that's it. I get the distinct impression that you guys are committee-based, and you just wanna

15:45:50 --> 15:46:09

Charles McCaw: coordinate across committees. You're not going to get anything done. You use the word aspirational; that's not a good word. We need specifics, I mean. And also, stop asking the communities what they want. They've been telling you what they want for the past 10, 15 years. If you haven't heard it now, you're probably not going to hear it.

15:46:09 --> 15:46:24

Charles McCaw: They want specific solutions. They want solutions that are measurable, that are actionable, that are specific, and that address the situation. They want timelines, and they want you to convince them that you know what you're doing, which means you measure what's going on

15:46:24 --> 15:46:30

Charles McCaw: at specific intervals and tell them how you're going to measure it. I think you need to shift your focus from

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Charles McCaw: community health to particulate or concentration. Community health is based on

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Charles McCaw: arbitrary... it takes a long time to determine what the community health is going to be. Five years, and it's arbitrary. In my community, I may have better access to healthcare

15:46:48 --> 15:46:54

Charles McCaw: than another community, and we're breathing the same air. So it's arbitrary. I want you guys to

15:46:54 --> 15:47:09

Charles McCaw: stop with the bureaucracy, focus on you're the expert, you know what to do. I mentioned before that the SNAPS identified several pollutants. We did pick up acrolein, and we also picked up 1,3-butadiene, okay?

15:47:09 --> 15:47:17

Charles McCaw: So these things have specific sources. I know that you haven't assigned a source to the acrolein yet, as far as I know.

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Charles McCaw: Target these sources and make sure that you have a plan in there. We need action and it needs to start now. You're not going to make everybody happy. There's going to be disappointing things. Action is what we need.

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Charles McCaw: Okay.

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Charles McCaw: I thank you.

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Matthew O'Donnell, TTD: Yeah, thank you, Charles. I appreciate your comments. And I know that's a thing that we say. Okay, I apologize. Yeah, sorry.

15:47:40 --> 15:47:44

Kevin Olp | CARB (he/him): Yeah, I think we're gonna wait. We're gonna wait till after public comment to respond.

15:47:44 --> 15:47:51

Sarah Sullivant | CARB (she/her): Thank you, Charles, for your comments. The next I have is Moses Huerta.

15:47:51 --> 15:47:54

Sarah Sullivant | CARB (she/her): So I'm going to ask you to unmute.

15:47:58 --> 15:48:13

Moses Huerta: Thank you for the opportunity to speak. My name is Moses Huerta. I'm here at Community Science here in City of Paramount. First and foremost, I want to thank everybody in the meeting and the hard work that's been done. I want to appreciate the co-chairs and their comments and setting the tone.

15:48:13 --> 15:48:29

Moses Huerta: Dr. Balmes, your comment stood out as setting the tone on what this roadmap is going to go forward. What stood out to me in this conversation and going forward would be, is, you know, the highlight of it is did emission reductions improve the health quality

15:48:29 --> 15:48:45

Moses Huerta: and health of benefits are happening where they're needed the most. I think this is strengthening what has already been done successfully and then building out the with the ECHO-AIR system. How can the ECHO-AIR expand our future support and advocacy? Well, it's going to strengthen

15:48:45 --> 15:49:02

Moses Huerta: some of the work that we're already doing, some of the community science work that I've been involved with. This is going to help me to start focusing on that as well. And I appreciate the professor highlighting that and some of the benefits of not being someone that is an academic, but somebody that has a community experience that can use this tool.

15:49:02 --> 15:49:19

Moses Huerta: Something that stood out in the air toxics portion of this in the AB617 strategy is to reduce the emissions of toxic air contaminants and criteria pollutants in communities affected by high cumulative exposure. And I think these partnerships that we see within the agency to

15:49:19 --> 15:49:26

Moses Huerta: start addressing those I think is important, and I appreciate that that's being, highlighted and spoken about.

15:49:26 --> 15:49:47

Moses Huerta: Increasing the previously unidentified risks and emergency pollutants as well is something that is very important and I really appreciate that that's actually included in the discussion, and probable advancement of some of the solutions that we want to look forward to, as in some of the strengthening the relationships between the agencies and your districts and also with the community.

15:49:47 --> 15:50:07

Moses Huerta: I'm fortunate that I've been part of the investments that the Air District has done in community science and air monitoring that actually has its own. We aspire to get those investments into our community, and then we actually put them into place to then get the information and get to these policies, to get to these policy developments that actually are starting to show action and

15:50:07 --> 15:50:11

Moses Huerta: and show some relief and sewing.

15:50:11 --> 15:50:28

Moses Huerta: And this continued commitment and developing the policies and methods to address these cumulative impacts is going to be highly important as this conversation goes forward. And I do want to highlight that something that the professor and also the community members with their concerns is that we need to build these tools out and these conversations and strengthen the

15:50:28 --> 15:50:44

Moses Huerta: getting from the measurements to then modeling and put those together and adding these toxics, which is all included in this conversation. All that data has to have value, has to have strength, and has to show an advancement. And what we all would like to see in this

15:50:44 --> 15:50:54

Moses Huerta: project going forward is clean air. Thank you all for your time and your efforts, and a robust conversation, and we'll look forward to seeing this going forward. Thank you.

15:50:55 --> 15:50:57

Sarah Sullivant | CARB (she/her): Thank you very much for your comments.

15:50:58 --> 15:51:03

Sarah Sullivant | CARB (she/her): I'm not seeing any additional hands for public comment.

15:51:04 --> 15:51:07

Sarah Sullivant | CARB (she/her): So at this time, I'm going to close public comments

15:51:07 --> 15:51:21

Sarah Sullivant | CARB (she/her): and come back to our presenters and Consultation Group and CARB staff. Matt, I believe, I know we have very little time left, so if you have a quick response. Or Kevin, you're coming on screen as well, if you have quick responses.

15:51:23 --> 15:51:25

Kevin Olp | CARB (he/him): LaShaye? Or Matt?

15:51:25 --> 15:51:54

LaShaye Cobley, TTD: One of the things, so I'm hearing very loudly, we want action. We want CARB to be able to walk and chew gum at the same time. And I think two things here that the roadmap I think addresses. One is that there are in, for example, Appendix E, we have 1,900 chemicals, right? And we already said that we have to strengthen our scientific foundation. We wanna move from being a reactive program to a proactive program. And so I hope that it doesn't come across as though we're twiddling

15:51:54 --> 15:52:12

LaShaye Cobley, TTD: our thumbs. I think things like strengthening our emissions inventory, while it is action, right? Like that is how we prioritize what we're doing so that we're not just being reactionary. And I think the other thing that's important about taking action is the early action items that we laid out, right? So the statewide plans for acrolein and ETO.

15:52:12 --> 15:52:19

LaShaye Cobley, TTD: Things like that, I think, is hopefully what you guys can see as some of the teeth that's a part of the roadmap.

15:52:19 --> 15:52:24

LaShaye Cobley, TTD: But some of this is getting our house in order so that we can move faster when the time comes.

15:52:24 --> 15:52:33

Kevin Olp | CARB (he/him): Just to add to that really quickly, thank you for your comments, Mr. McCaw. I do think some of the bureaucracy is actually the hardest but most important work. Because

15:52:33 --> 15:52:55

Kevin Olp | CARB (he/him): in order to move from understanding of acrolein to regulation, we need to really characterize all of the different sources, vehicular, non-vehicular across the state. And that is a lot of work that needs to be spread between the air districts and CARB to accelerate that work. And if we just do it alone, it's gonna take a lot longer. So figuring out how we coordinate, how we leverage each other's resources,

15:52:55 --> 15:53:09

Kevin Olp | CARB (he/him): regulations, and scientific knowledge actually helps accelerate us in that direction. So it can be tedious, but it ultimately helps us to move as fast as we can with the limited resources that we have.

15:53:12 --> 15:53:14

Sarah Sullivant | CARB (she/her): Great. Thank you, everyone.

15:53:14 --> 15:53:28

Sarah Sullivant | CARB (she/her): So that concludes topic number two. We'll just pull the slides back up really fast to do a bit of closeout on our topics today before we go to our final public comment on non-agenda items.

15:53:31 --> 15:53:39

Sarah Sullivant | CARB (she/her): While we're pulling up the slides, I want to turn it over to see if our Co-Chairs have any final words that they would like to share.

15:53:40 --> 15:53:42

CG Co Chair-John Balmes: I... I do, ...

15:53:42 --> 15:53:43

CG Co Chair-John Balmes: Sarah.

15:53:43 --> 15:53:45

Sarah Sullivant | CARB (she/her): Go ahead, Dr. Balmes.

15:53:45 --> 15:53:55

CG Co Chair-John Balmes: I think that Paula made a great point about trying to see something like a pilot

15:53:55 --> 15:54:00

CG Co Chair-John Balmes: project with communities for...

15:54:00 --> 15:54:12

CG Co Chair-John Balmes: to deal with a community, excuse me, not communities, with a community, to try to see how measuring a specific toxin

15:54:12 --> 15:54:24

CG Co Chair-John Balmes: and then, coming up with a plan to reduce exposures to that toxin would be a nice complement to, the larger,

15:54:24 --> 15:54:31

CG Co Chair-John Balmes: roadmap activity. And, you know, I know you need resources for that, so...

15:54:31 --> 15:54:39

CG Co Chair-John Balmes: I'm not saying, jump right in, but I think that would be a great way to sort of show that

15:54:39 --> 15:54:42

CG Co Chair-John Balmes: we aren't just in the clouds

15:54:42 --> 15:54:49

CG Co Chair-John Balmes: with the toxic roadmap, that we're actually trying to make progress with a specific community.

15:54:49 --> 15:54:57

CG Co Chair-John Balmes: You know, picking that community, picking the toxin, that's tricky. But I think it was a great idea that Paula had. I just want to endorse that.

15:54:59 --> 15:55:04

Sarah Sullivant | CARB (she/her): Thank you, Dr. Balmes. I'm also seeing Co-Chair Takvorian, your hand up.

15:55:03 --> 15:55:24

CG Co Chair-Diane Takvorian: Thank you. Yes, I just wanted to thank staff, CARB staff, you know, the OCAP staff, who's really pulled this together, and the Consultation Group and the public who attended today. I think this was a new idea to have these study sessions, and I believe this one was really

15:55:24 --> 15:55:40

CG Co Chair-Diane Takvorian: important, a robust discussion. So congratulations to everyone. I also appreciate the comments that a number of folks have made about moving. And I think LaShaye's comment a few minutes ago

15:55:40 --> 15:55:55

CG Co Chair-Diane Takvorian: was really important. And I think that that has to be the driving force for all of us, is that we take action on whatever we might define now as low hanging fruit and be able to get improvements as quickly as possible. We know a lot,

15:55:55 --> 15:56:11

CG Co Chair-Diane Takvorian: and we have to keep building this strong scientific base. And we really have to have measurable improvements in communities that we can point to as successes so that we can keep building on that. And I know that's the challenge, is those things

15:56:11 --> 15:56:21

CG Co Chair-Diane Takvorian: can create some tension, but I really appreciate all the work that everyone's done to really move that path forward. So thanks to everyone.

15:56:23 --> 15:56:39

Sarah Sullivant | CARB (she/her): Thank you so much. So just a couple of quick reminders and information about our timeline. So notes from today will be posted along with the video, and those notes will be shared with TTD for submission to the docket.

15:56:39 --> 15:56:43

Sarah Sullivant | CARB (she/her): Our next study session is coming up on October 29th.

15:56:43 --> 15:56:48

Sarah Sullivant | CARB (she/her): And then we have the full Consultation Group meeting in Riverside on December 2nd.

15:56:48 --> 15:56:54

Sarah Sullivant | CARB (she/her): Anything I've missed before we go into our final public comment?

15:56:56 --> 15:57:06

Kevin Olp | CARB (he/him): I just want to reiterate our thanks for all of the members and the robust public discussion, and really looking forward to continuing this at our next study session. So thank you all for your contributions today.

15:57:08 --> 15:57:10

Sarah Sullivant | CARB (she/her): Agreed. Thank you very much.

15:57:11 --> 15:57:26

Sarah Sullivant | CARB (she/her): All right, we will move into our final public comment on non-agenda items. So as a reminder, we have three minutes per person. We will ask you to unmute. Please stay muted until it's your turn to speak and please state your name and affiliation.

15:57:28 --> 15:57:30

Sarah Sullivant | CARB (she/her): We will go to the queue.

15:57:32 --> 15:57:40

Sarah Sullivant | CARB (she/her): I see Charles McCaw as the first hand raised, and I'm going to ask you to unmute. Can you

15:57:40 --> 15:57:41

Sarah Sullivant | CARB (she/her): unmute now?

15:57:40 --> 15:57:52

Charles McCaw: Yeah, I'm not normally this annoying. Well, it depends on who you ask. But with regard to the last comment, you already have your target audience. I said we just wrapped up the SNAPS

15:57:52 --> 15:57:58

Charles McCaw: environmental thing. So we have the data. We have everything you want. We have

15:57:58 --> 15:58:13

Charles McCaw: data, including acrolein data, PM 2.5. The PM 2.5, VOCs, ozone are continuous monitoring, 24 hours. We have some GC data for benzene, acrolein, 1,3-butadiene.

15:58:13 --> 15:58:28

Charles McCaw: Although it seems to be taking a heck of a long time for all the data to be completed. In a past life, I used to run a chemistry lab. If I wanted acrolein, I could set up a GC, or have someone set up a GLC, and by the time I came back from lunch

15:58:28 --> 15:58:45

Charles McCaw: I'd have my results. But that's beside the point. You have an environment, you have a community that that you would consider to be underserved. That's code name for black where we are. Okay. What more do we need? You have this ready-made thing that's everything you want. You have the data.

15:58:45 --> 15:58:58

Charles McCaw: You have all the data there. You also could use Lost Hills, which has CARB data. So everything you need is there, at least, I think, for some pilot project or something to do. What you need is,

15:58:58 --> 15:59:05

Charles McCaw: repeating myself, a specific plan and some means of source attribution. Okay.

15:59:05 --> 15:59:20

Charles McCaw: I'm a data guy. I believe in measurements. Models? Iffy, very iffy, unless they've been validated. What can we do to measure the impact? Is the impact in my community, the one that's east of the,

15:59:20 --> 15:59:32

Charles McCaw: Inglewood oil field, what are we impacted by? It doesn't seem to be the oil field. Is it the leaf blowers? Is it the trucks that are going through the area? Is it the main arteries of the roads that are driving up there? Is it...

15:59:32 --> 15:59:40

Charles McCaw: my neighbor's swimming pool? That's what we want to know. And I'm sure the community is ready and willing to work with you. And.

15:59:40 --> 15:59:43

Charles McCaw: although I don't have their permission, I think they would be...

15:59:43 --> 15:59:46

Charles McCaw: They would volunteer to be your pilot subject.

15:59:46 --> 15:59:52

Charles McCaw: Thanks. You'll hear from me no more tonight. Thank you. Thanks for everything, by the way.

15:59:53 --> 15:59:55

Sarah Sullivant | CARB (she/her): Thank you very much for your comments.

15:59:57 --> 16:00:00

Sarah Sullivant | CARB (she/her): I don't see any additional hands raised.

16:00:01 --> 16:00:16

Sarah Sullivant | CARB (she/her): And we are right at time. So that is great timing. Thank you all again for your time today, to our presenters, to the Consultation Group, to CARB staff, to the members of the public who participated as well.

16:00:16 --> 16:00:19

Sarah Sullivant | CARB (she/her): Yeah, with that, I don't know, Kevin, Deldi, any final

16:00:19 --> 16:00:21

Sarah Sullivant | CARB (she/her): comments before we part.

16:00:23 --> 16:00:34

Deldi Reyes, CARB: I just want to reiterate the thanks. I also want to note that for December 2nd in Riverside, it is looking like the main topic is going to be shaping up as ways to strengthen the program.

16:00:34 --> 16:00:50

Deldi Reyes, CARB: Big, meaty topic. And as usual, we'll be looking for volunteers as ad hoc members to help us plan for that conversation. Big thank you to the ad hoc members, and a reminder that if you are an ad hoc member, those meetings are compensable, and so you can

16:00:50 --> 16:00:54

Deldi Reyes, CARB: request the stipend for that meeting.

16:00:56 --> 16:00:58

Sarah Sullivant | CARB (she/her): Thank you, Deldi.

16:00:58 --> 16:01:03

Sarah Sullivant | CARB (she/her): Thank you everyone again. We look forward to seeing you on October 29th, if not before then.

16:01:05 --> 16:01:08

CG - Paula Torrado, OEHHA: Thank you so much, Sarah. Thank you, everyone.

16:01:08 --> 16:01:10

CG - Paula Torrado, OEHHA: Right.

16:01:11 --> 16:01:13

CG Co Chair-John Balmes: Thank you, everyone.

16:01:14 --> 16:01:15

LaShaye Cobley, TTD: Thanks.

16:01:16 --> 16:01:18

CG-Jasmine Beltran: Thank you. Bye.