

CLIMATE ACTION, RESILIENCE, AND ENVIRONMENT COMMITTEE

Council of the County of Maui

MINUTES

November 17, 2021

Online via BlueJeans Link

CONVENE: 9:02 a.m.

PRESENT: VOTING MEMBERS:

Councilmember Kelly Takaya King, Chair
Councilmember Shane M. Sinenci, Vice-Chair
Councilmember Gabe Johnson
Councilmember Alice L. Lee
Councilmember Michael J. Molina
Councilmember Yuki Lei K. Sugimura (in 9:27 a.m.)
Councilmember Tamara Paltin

NON-VOTING MEMBER:

Councilmember Keani Rawlins-Fernandez (in 11:45 a.m.)

STAFF:

James Forrest, Legislative Attorney
David Raatz, Supervising Legislative Attorney
Lesley Milner, Legislative Analyst
Nicole Siegel, Legislative Analyst
Wilton Leauanae, Legislative Analyst
Rayna Yap, Committee Secretary
Lenora Dineen, Office of Council Services Assistant Clerk

Axel Beers, Executive Assistant to Councilmember Kelly Takaya King
Kate Griffiths, Executive Assistant to Councilmember Gabe Johnson
Ellen McKinley, Executive Assistant to Councilmember Kelly Takaya King
Sarah Sexton, Executive Assistant to Councilmember Kelly Takaya King
Jordan Helle, Executive Assistant to Councilmember Yuki Lei Sugimura
Roxanne Morita, Lanai District Office

ADMIN.:

Alexander de Roode, Energy Commissioner, Mayor's Office of Climate Action, Sustainability, and Resiliency
Eric Nakagawa, Director, Department of Environmental Management
Keola Whittaker, Deputy Corporation Counsel, Department of the Corporation Counsel

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OTHERS: Senator Chris Lee, District 25 (CARE-4)
Joshua Cooper, University of Hawai'i and Climate Reality Project (CARE-4)
Maria Tome, Managing Director for Energy Efficiency and Renewable Energy, State Energy Office (CARE-4)
Suzanne Case, Chairperson, Board of Land and Natural Resources (CARE-4)
Darla Palmer-Ellingson, Climate Action Advisory Committee Chair (CARE-4)
Greg Shimokawa, Hawaiian Electric Company (CARE-1(7))
Mike Wallerstein, Public Utilities Commission (CARE-1(7))
Anand Samtani, Public Utilities Commission (CARE-1(7))
Mark Wong, Hawaiian Electric Company (CARE-1(7))
Others (3)

PRESS: *Akakū: Maui Community Television, Inc.*

CHAIR KING: . . .*(gavel)*. . . All right. Good morning. Will the Climate Action, Resilience, and Environment Committee please come to order? It is November 17, 2021. My daughter is 35 today.

COUNCILMEMBER LEE: Happy birthday.

CHAIR KING: My name is Kelly King. I'm the Chair of the Committee. We're going to go ahead and...I know there's a whole...there's a whole disclaimer I need to read, but I want to do introductions first because I'm so excited to be back after taking the last week of Committee meetings off. And my Committee Vice-Chair is here, Councilmember Shane Sinenci from East Maui. Aloha and tere from Estonia.

VICE-CHAIR SINENCI: Tere, Chair, and aloha kakahiaka, hauoli la hanau, mai Maui Hikina. I'm here at the Hāna Council Office with my EA, Dawn Lono.

CHAIR KING: Okay, great. And I forgot to say that I'm here alone. My husband's upstairs in his meetings. Next, we'll go to Council Chair Alice Lee. Tere and aloha kakahiaka.

COUNCILMEMBER LEE: Tere, Madam Chair, and good to have you back. And looking forward to another exciting CARE meeting.

CHAIR KING: Okay.

COUNCILMEMBER LEE: I am here alone in my office at home.

CHAIR KING: Mahalo. Next, we'll go to Lāna'i. Councilmember Gabe Johnson, aloha kakahiaka and tere.

COUNCILMEMBER JOHNSON: Good morning, Chair. Good morning, Members. Tere to all of you. I am home alone on the beautiful Island of Lāna'i.

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CHAIR KING: All right. And still from under the bridge in Makawao, we have Councilmember Mike Molina. Tere and aloha kakahiaka.

COUNCILMEMBER MOLINA: All right. Good morning, tere, and aloha to you, Madam Chair, my colleagues, and everyone else joining us for our CARE meeting this morning. For the record, I am transmitting from my home under the virtual bridge here in Makawao, and in the next room is my wife and the pets. Aloha.

CHAIR KING: Aloha. Okay. I'll look for that dog barking. I heard some of it on the meeting last night that I was on. And then we have Councilmember Tamara Paltin from West Maui, who is also--I'm going to start saying this because you're going to be taking over at some point, but--my alternate on the Hawai'i State Association of Counties Executive Board. So aloha kakahiaka and tere.

COUNCILMEMBER PALTIN: Aloha kakahiaka, tere. I'm broadcasting live and direct from the West Maui District Office, a public location, with my aide, Angela, who is more than six feet away.

CHAIR KING: Okay. Aloha and thank you for that. I did get a notice from...text from Councilmember Sugimura that she's up inspecting some axis deer issues Upcountry. So she'll be a little bit late this morning. So we'll go ahead and start with the disclaimer. Oh, and for folks listening and preparing to present, please mute your...any cell phone or noise-making devices you may have. And we'll keep you muted until it's time for your presentation. Thank you so much. So this online meeting is being conducted in accordance with the Governor's most recent emergency proclamation on COVID-19. Please see the last page of the agenda for information on meeting connectivity. Members, the Governor's most recent emergency proclamation also includes the following mandate, quote, a board holding a remote meeting pursuant to this section shall not be required to allow members of the public to join Members in person at non-public locations where board Members are physically present, or to identify these locations in the notice required by Section 92-7 HRS, provided that at the meeting, any board Member shall state who, if anyone, is present at the non-public location with the Member. In accordance with the Governor's mandate, if you are at a non-public workspace, when your name is called, please identify by name who is present with you in the room, vehicle, or workspace. Okay. We also will welcome, if they choose to join us, our two Non-Voting Members, Councilmember Tasha Kama and Councilmember Keani Rawlins-Fernandez. Today, Members, we have with us from the Administration Keola Whittaker, Deputy Corporation Counsel; Alexander de Roode, Energy Commissioner, Mayor's Office of Climate Action, Sustainability, and Resiliency; and Eric Nakagawa, Director, Department of Environmental Management. Other resource people that we will have for our two morning items: Senator Chris Lee, District 25, CARE-4...for CARE-4. He's available from 9:00 to 10:00, so we will be trying to get him on early. And he...Chris was the Chair of the Senate Committee on Transportation...or is the Senate...the Chair of the Senate Committee. When he was a House of Representatives Member, he was the Chair of the House Committee on Judiciary and House Committee on Energy and Environmental Protection. We have Joshua Cooper with us from the University of Hawai'i and also the Hawai'i Trainer for the Climate

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Reality Project. And Maria Tome, who came on a little bit earlier this morning, is the Managing Director for Energy Efficiency and Renewable Energy with the State Energy Office. Suzanne Case, who will be here a little bit later, is the Chairperson for the Board of Land and Natural Resources. And Darla Palmer-Ellingson, who is our Climate Action Advisory Committee Chair. Those are all for CARE-4 panel. For the second presentation, we'll have Greg Shimokawa from Hawaiian Electric Company, he's the Manager of Energy Procurement; Mark Wong from HECO as well, Manager of Customer Energy Resources Community and Commercial Programs; and Mike Wallerstein, who's with the Public Utilities Commission, the Staff Attorney and Hearings Officer for the PUC. Our Committee Staff today, who...we said goodbye to Nicole Siegel at the last CARE Committee Meeting, and replacing her for this...for the foreseeable future is Lesley Milner, our Budget Committee Analyst for the OCS, and our backup Legislative Analyst, Wilton Leauanae. We also have Rayna Yap, who's been with OCS a long time, who's our Committee Secretary; and our wonderful Legislative Attorney, James Forrest; as well as Lei Dineen, our Council Services Assistant Clerk. Okay. So Members, I'm going to check...let's see. Lesley, do we have anyone signed up to testify?

MS. MILNER: No, we have no one signed up to testify.

CHAIR KING: Okay. So I was going to go ahead and go through the first panel discussion first and then take testimony, but seeing as there's no one, we'll do one last call for testimony. Anybody listening who wishes to testify, just unmute yourself right now and give us a shout out. A couple seconds. And if not, I'll just...if there's no objection, we'll go ahead and close public testimony.

COUNCILMEMBERS: No objections.

COUNCILMEMBERS VOICED NO OBJECTIONS (Excused: YLS)

CHAIR KING: Okay. All right. Thank you, Committee. And this...we will be livestreaming this on Facebook because there's a lot of information that we're going to be using today. Today's agenda was designed to be a discussion post-COP26, and we want to kind of use this as a springboard to get to a point where we can start talking about goal setting for greenhouse gas emission reductions for our County. I hope to work collaboratively with sister Counties and State agencies, as well as our State Legislature, to set goals for greenhouse gas reduction in accordance with our State goals and our Administrative goals, but possibly even going further. And I just wanted to share with everybody two points that Governor Ige made when he spoke at COP26 were one, that we have no minorities as we go forward and concentrate on a just transition, that we have no minorities in Hawai'i. We are all minorities. So we are looking at it as a melting pot, and we pay attention to our host culture first and foremost, but we also acknowledge that there are many ethnic groups that...and everybody needs to be brought along in our resetting of our economic goals. And also, the other thing that he said was that carbon neutrality is not enough, that we have to go for carbon negative. And this has been a...this was a theme at COP26 because it was clear that in...especially in one of my sessions called America's All In, that America's not all in. Those of us who are in are all in, but we all know what's happening at Congress and that there's a divide in the country, you know, people who are still denying climate change. So it's up to us

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who are willing and able to address this issue, to go as far as we can because we have to make up for those who won't or can't meet the goals. And it doesn't...it doesn't help to waste a lot of time finger pointing and arguing with those folks. We really have to move ahead in a...in a very positive way to do as much as we can. So I'm really thrilled to be presenting this climate change mitigation adaptation...oh, I'm sorry, the first item today, CARE-4, Climate Change Mitigation and Adaptation Technologies panel. And this is a panel that several of these people were at COP26. And so they'll hopefully be giving us a little bit of their impression too, as we move forward. And just kind of keep in mind...maybe write down your questions for afterwards because there's going to be six different presenters, and they're going to all have a little bit of different perspective. But I'm hoping that by looking at everyone's priorities, we'll get a feeling for how this Committee should start working forward in goal setting for our County. Our second item is CARE-1(7), which is Community Based Renewable Energy. That will be our presentation by the PUC, the Public Utilities Commission, and the Hawaiian Electric Company. And then if there's time, CARE-1(8) is just some wrap up thoughts on COP26. If I don't get time to do that, I will be doing a written report on it to the Council because a lot was going on, but there are some consolidated messages. And I have to sort out my thoughts for two weeks of giving presentations almost every day. But I really appreciate the Committee and the Council's support, and especially your support, Council Chair Lee, for the work that I did over there and the messaging, and all the bills that were passed in my absence. You folks were champs. It kind of made me wonder, hey, maybe when I want to pass a bill, I should just not show up, but you all did a fantastic job and made Maui look really...look really good. And you know, I think because of that I was asked back several times to pavilions to do multiple presentations. Folks were really excited about what was happening in Maui. So congratulations to all of us.

CARE-4: CLIMATE CHANGE MITIGATION AND ADAPTATION TECHNOLOGIES
(CC 20-11)

CHAIR KING: Okay. So we're going to go into the first item, Climate...CARE-4, Climate Change Mitigation and Adaptation Technologies. And Members, pursuant to Rule 18(A) of the Rules of the Council, I would like to designate the following as resource people: Senator Chris Lee, District 25; Joshua Cooper, University of Hawai'i and Climate Reality Project; Maria Tome, Managing Director for Energy Efficiency and Renewable Energy, State Energy Office; Suzanne Case, Chairperson, Board of Land and Natural Resources, who will be joining us at around 9:30 or so; Alex de Roode, Energy Commissioner, Maui's [sic] Office of Climate Action, Sustainability, and Resiliency; and Darla Palmer-Ellingson, Climate Action Advisory Committee Chair. So if there are no objections, those folks will be designated as resource persons.

COUNCILMEMBERS: No objections.

COUNCILMEMBERS VOICED NO OBJECTIONS (Excused: YLS)

CHAIR KING: Okay. Thank you. We passed the testimony. I think we save about five or ten minutes when we don't have to do that whole introduction of all the testimony rules.

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So now that we're into...do the presentations, I'm going to go ahead and start with the panel presentations in this order that I announced them. So the first presenter will be Senator Chris Lee. Are you on, Chris?

MR. LEE: Good morning. Can you hear me?

CHAIR KING: Good morning. We can. I love your background. Is that virtual, or are you actually sitting there?

MR. LEE: No, no. I try to stay as far away from the Capitol this time of year. It's still pandemic season. So happy to be joining you remotely.

CHAIR KING: Okay. So we're going to go into Senator Lee's presentation first. And we have about eight to ten minutes for each presentation. So I think Staff will let you know when we're getting close to the end. But Senator Lee was also there at COP26, and I think he did one or two presentations there as well. So we're going to let you go ahead and take the floor.

MR. LEE: Thank you. Thank you for the opportunity, Councilmember and Members of the Committee. I think, building on some of the discussion, yes, I had the tremendous opportunity to participate at COP26 on behalf of our State, along with our colleagues. And there were a number of takeaways, but it was, I think, a tremendously important discussion, and I think beneficial for our State. And there were some great things that came out of it. So aside from being, I think, on the inside and giving a couple of the presentations, as Kelly had mentioned, I was able to join in some of the protests in the afternoon outside saying, you know, in the morning we're going to cut some deals and see what we can do together, and then in the afternoon we'll go outside and argue that we need to do more. And it's a...it's been a very, I think, positive thing, because both on the inside and the outside, everybody, I think, was working toward doing more. But what is unique about this discussion and this whole conference at this international level is that it is the states, the provinces, the counties that are really leading the way. And so when we think about what comes out of this, it really is on us to set the bar high because those international agreements, those national commitments, both in the U.S. and elsewhere, are going to follow what's being done at the forefront. And so you set that bar high, and our nations and our international community will inevitably have the political capacity then to identify what's working and catch up. So that said, you know, we're at a great spot in Hawai'i where...just for a quick recap, of course, in 2015 we have our 100 percent RPS, by 2025 Statewide. We're making big strides, thanks to help from our stakeholders and utilities and everybody else. We were also the first State to move to directing net zero public schools and university campuses. And Maui's one of those great examples that has already really set the bar for showing that this can be done at MCC. And on top of that, in 2018, I think, which the Governor had mentioned repeatedly, you know, we were the first State to adopt, by law, a carbon negative economy-wide directive for our State by 2045, consuming more greenhouse gases than we emit. And that's important because we are still the only State in the country that has done that. And so our voice from the United States, being able to come in and say, in fact, we are going beyond Paris. We are going beyond net zero. We are going to be part of a solution, not just for us, but for everybody around the world.

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I think it got enormous, I think, good will, because how better can you say we want to work together than we want to do our part not only to help ourselves, but help you too by reducing emissions overall. And that's something that I think got a ton of interest, and we had a lot of great follow-up conversations with different folks from the technology space, and investment, and so on and so forth. But when it comes to what we can do here in Hawai'i as Government leaders and community leaders, you know, on the State side, we are looking at a number of things this coming year. And we have perhaps the best ability to make significant change quickly because we control, collectively, public infrastructure, which can be a huge resource. And we know that we already have to make a lot of investment in our public infrastructure across the State and across every island, whether it's, you know, airports, harbors, transportation, schools, hospitals, and on and on and on, parks, just everything that everybody I think...that we all hear we can do better. Not only can we do better, but we can do it in a way that helps address these critical issues. And so I want to talk about that just very briefly because when we talk about this...and I'll focus on transportation first and foremost. As was mentioned, I chair the Senate Transportation Committee now. So we are in the midst of putting together some of the stuff into actionable steps that we can take this coming legislative session, and hopefully in partnership with action at the Counties as well, and support each other. What we're finding...I think what came out of, not just COP26, but a lot of the discussions around the world in similar states and cities is that transportation, the obvious stuff...of course, we're driving around emitting greenhouse gas emissions. And so of course we want to electrify that and give people cheaper, cleaner, better options for EVs and all of that. And that's something that, you know, is nothing new. But I think what we forget often is that when you look at the amount of emissions and the cost of transportation, which affects our cost of living here in Hawai'i, the faster we can make that switch, the better. But it's not just EVs that are the solution, because if we electrify everything tomorrow, that's great. We still have enormous cost. And so how do we deal with that as well? And you can think about retooling our entire transportation grid on each island to take into account that we shouldn't just be electrifying cars, but we should get...be getting more efficient public transportation, getting people options to be able to live, work, play, commute without needing to get into a car and drive 25 miles to get to where they want to go and get back. And that's true of kids getting to school too. Parents don't have to drop off their kids. Not only is that a time save for them, it's a cost save for them. It's more flexibility in working hours. For kids, it's better exercise, better health outcomes. It's great all around. But that requires investments in transportation infrastructure. And I really want to commend Maui's legislative delegation, who have done perhaps better than any other island in getting resources for local projects and capital improvement projects from the State. Senator Kitagawa in particular has been enormously successful, and a great champion for the island. But we got to think also, all right, what comes next. And what we've found is with changing technology, you now have electric bikes, which for the first time can provide meaningful commutes that are much further and much longer than ever before, and do that in a way that's comfortable for people, and really reduce the need for families to have one car for each member of the family, but perhaps cut that in half, reduce their costs of living, and still have the ability to commute effectively. But that requires putting in infrastructure to allow that safe travel without kids or family members or kūpuna or whomever feeling like they're riding alongside a highway with cars flying by at 45 miles per hour just a few feet away. So

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we are looking at this in a big way because we know that cities around the world...and as has been discussed at COP26, when you have portions of the population, 15, 20, 30 percent, that are commuting in these cleaner, cheaper ways, that's cars off the road. So it benefits everybody and reduces commute times and has a multiplier effect. The other thing we can do with public transportation is really use it to do carbon reduction and sequestration. Planting trees everywhere we need go, which is not a normal thing, because it requires maintenance and other stuff, but that's something we absolutely have to do. And to sum it up, because I realize there'll be ample opportunity to talk about this later, if we use our public infrastructure wisely, we can use it to achieve our goals of reducing emissions in a significant way, more than perhaps any other single solution, and at the same time reduce our costs and reduce the traffic fatalities and everything else that we're seeing and dealing with here on a day to day basis in Hawai'i. And Hawai'i is in a place where we have the better weather and resources and density and everything else to do it better than pretty much anywhere else in the world. And if places in Europe and others that deal with horrific winters and other things like that can get this done and move to where almost half the population is commuting by bike or by public transit or other means, reducing costs for everyone and being far more efficient with emissions and doing their part for climate, then we can certainly do it too. And I'll just return and close by saying, you know, these discussions, while happening at the national and international level, I think the one takeaway from COP26 was that it is states, it's provinces, it's counties that are actually taking action, where international and national agreements are faltering and stalling. And so it is us that are leading the way. And if we can move that and push that bar a little bit further, it gives the United States, and our Administration, and other folks around the world something to point to and say look, it can be done here. That's why we need to do it. And it's not just for our climate, but it's to help local citizens, to reduce cost for everybody, and to build a better future for our kids. So I'm happy to follow up and answer any questions and participate, and hopefully work together this coming year on our priorities. Mahalo for the opportunity.

CHAIR KING: Okay. Thank you so much. I really appreciate you being here, Senator Lee. And I know you have to leave soon, so if anybody's got...I wanted to make a couple of statements, and I wrote...and I appreciate...because we, Senator Lee and I, ran into each other at a couple of evening events. And every time we started to try to talk shop like this, somebody slapped us on the wrist and said, we're supposed to be enjoying the evening. Don't talk politics. So it's nice to be able to have this discussion. And the other thing I wanted to mention as far as transportation is that one of my housemates while I was there, Bridget Shays (*phonetic*), the President of . . . (*inaudible*). . . USA, she's from...she's a commissioner from Texas. And they have been quantifying their reduction of greenhouse gases through the virtual meetings that they've been holding over the last couple of years. So that might be something that we can do also as a County and as a State, is how much are we saving. You know, for instance, you didn't have to fly over here to Maui today and then pick up a rental car and drive over. So you know, there's a lot of that savings. Maui County wants to continue with these virtual meetings. And right now, I think we have a one month gap between the end of the Governor's declaration of emergency, which goes until the end of November, and the start of the law that was passed in the last legislative session that allows us to continue virtual meetings if there's no emergency. So we're hoping he fills in that

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December gap so we can continue meeting virtually, but maybe you can help out with that, just give him a little poke. Just one more month, and then we'll be good to go and the new law kicks in in, you know, the beginning of January. Does anybody have...Committee Members, does anybody have any burning questions for Senator Lee before he has to drop off? Otherwise, you know, we will be speaking again soon. And we are...you know, from...as was said by Senator Lee from...the biggest takeaway from COP was the need to collaborate multi-level. And so this is just the beginning of these discussions. And I look forward to...you'll see us...you'll see some of us at the legislative session, for instance. So we'll be following the legislation that HSAC is endorsing, as well as Maui County. So thank you so much for being here. I see we have no questions. So we'll let you get on with your day. And I really appreciate your time and your attitude towards working with the Counties.

MR. LEE: Well, thank you very much.

CHAIR KING: Okay. Aloha.

COUNCILMEMBER PALTIN: I had a question, Chair King.

CHAIR KING: Oh, did you have a question? I wasn't sure if you were waving goodbye. Did you have a question, Member Paltin?

COUNCILMEMBER PALTIN: Yeah, I just was wondering, I mean, like with the possible electrification of transportation and whatnot, do you envision the HiRUC model to come forward more quickly?

MR. LEE: Without getting into opening too big a can of worms, I think generally what we're looking at...and Hawai'i's further ahead than most places, with the exception of California. And we're actually, with some of our California counterparts, working on this right now on the State side. But if we can take resources and basically move that direction generally, where...and I don't know to what extent you guys have defined that for yourselves, that particular model. It comes in different flavors in different places. But I think I'd say we want to electrify as quickly as possible and open it up equitably to all communities to make sure that unlike you know, solar deployment, folks who are in underserved areas aren't left behind. But at the same time, I think what's been left out of the discussion in talking about a lot of this stuff is that we can use public investment to change the way that our roads and streets and bike facilities and public transit are designed. And that is the bigger, actually, solution because it has even more potential to reduce emissions more quickly, while also giving benefit to the public in ways that direct electrification cannot. So it's both, but happy to get into the weeds because it is a very deep rabbit hole there.

COUNCILMEMBER PALTIN: Thank you. And just I don't know if everyone knows. Maui got the \$22 million Federal funding to relocate the highway for West Maui. So maybe we can start there.

MR. LEE: Yeah.

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CHAIR KING: Excellent. Okay. Well, thank you so much, and thanks for that announcement, Member Paltin. We'll let Senator Lee get on with his day. And a hui hou. We'll talk to you soon. Okay. Members, the next presenter is Joshua Cooper. He is a professor at the University of Hawai'i. He's also the Hawai'i Trainer for the Climate Reality Project, but I'm going to let him introduce some of the other things because I asked him at the...at COP26, what do you want me to use as your title, because he does so much. And just walking through COP with him and having him go, oh, now I've got to go talk to the Prime Minister of Tunisia, I was asking him, what...who are you, and what are you actually doing. But Joshua was our second housemate at COP. And so I know he's very focused on human rights. He did a lot of work with the human rights groups, both inside the blue zone and outside. So I will let you go ahead and take it away, Josh, and the next ten minutes are yours.

MR. COOPER: Mahalo. Thank you so much for inviting me and including me in this important conversation. It's great to share a little bit about what was happening at the UN Framework Convention on Climate Change Conference of Parties 26. It was definitely a grueling two-week session, but what I think is really important is what we're doing today, is bringing that information from the international and distilling it down to the islands to see what is relevant and what we can take from that in moving forward. And it's great to be on after Representative Chris Lee. As Chris shared, I was very fortunate to be inside the blue zone and part of negotiations. I focused a lot on what's known as ACE, and that's Action for Climate Empowerment, and also on Article 6, which is loss and damages, which is seen as very important for Pacific Island Nations and people being impacted by the climate crisis that we're all facing today. I was also there, even fortunate to participate outside with a lot of the youth that was at the Fridays for the Future march, plus the Global Day of Action following on that Saturday. And then, of course, there was a plenary, a people's plenary that took place on Friday. And that was when they really brought together all the groups. And there's major groups and other stakeholders known as NGOs, and that really includes Indigenous Peoples, which I'm very fortunate to be able to assist from the Pacific, as well as around the world, but also brings together a...very much a feminist climate justice position with the women's group, also youth, as well as research as well. So I've been participating in many of those aspects. The main thing I thought I would share today, based on the other speakers, is the aspect on really focusing on three things I think we can take away from COP and bring home. One is action, because one of the exciting things about when you're there, you really do see a lot of initiatives that might really work in our islands, and you're able to make that connection and start an exchange, which is a lot more healthier than usual, the extraction model of people coming to . . . *(inaudible)*. . . our islands and seeing what they want from us. And so I think that is very exciting, is action, what we can do and how we can take action today. The next is acceleration, because we really can, with the technology, move faster than we had thought to really come up with comprehensive system change. And then the final one is accountability. And that's really, as we're doing all these new actions, how can we make sure the action and acceleration also make sure that no one is left behind. And that's, of course, the strong language that is in the UN Sustainable Development Goals, otherwise known as the SDG. So I think the Paris Agreement, and now Glasgow, plus the Sustainable Development Goals for the 2030 agenda are really two good frameworks to build our economy and balance our ecology and make sure that we also

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never forget equality and equity for all, as was raised also by Councilmember King and also Governor Ige. Under...one of the big angles that we were focusing on was known as ACE, and that's Action for Climate Empowerment. It has a couple of features that I think is really important. And then this also builds on the great work that Maui has been doing with education. When you start to share how a bill becomes a law, it was sort of an update to the I'm Just a Bill on Capitol Hill videos many of us saw when we were keiki. And when you look at ACE, it focuses on a handful of things; education, training, public awareness, public participation, public access to information, and international cooperation. And I think that's what's so crucial. And I think Hawai'i has taken a lead, as our Senator shared with us, Senator Lee, in a couple of ways. One, we've done a voluntary local review, a VLR, around the Sustainable Development Goals. And that was seen historic because Hawai'i as a State actually participated just last year at the UN General Assembly. So that's significant. We have this legacy we can build on. But the other aspect that was really important of what came out of COP, because if anyone asked what happened at COP...and it's almost like people touching an elephant, different parts of it, and describing it. No one would really know what happened even if you were everywhere. I was in the blue zone, in the pavilions where great ideas were being hatched and shared by the Mayor of Kuala Lumpur, and the next second you're in the negotiations looking at adding a paragraph or specific language on human rights, which many states wanted to delete to not have a people-centered approach. One of the most important things that did come out was the...known as the NDCs, nationally determined contributions. And the United States submitted its NDC. Now, this is a great--report card is a simple way to think of it--it's a report card on how we're doing to decarbonize our country. And what I would say the greatest takeaway...what we could do, and I'd be excited to partner with everyone on the Council, is to do an LDC, a locally determined contribution, where we could actually measure--not every year because we're just spending our whole year writing a report, but every two years--because every two years then, we could submit a report and then take a year to see how we're doing with this locally determined contributions and how much carbon we have in our economy, where it's coming from, and then solicit input from people and have exciting, engaging opportunities where the public can share with ideas on how we can decrease that. So that's why I think that ACE, the Action for Climate Empowerment, is a great model. It's Article 12 under the Paris Agreement, but then there has not been a single LDC yet. So it would keep Hawai'i and Maui in the forefront to do an LDC for next year or 2023, depending on the schedule. And that way we could see, well, where is the carbon . . . *(inaudible)*. . . in our County? Where is it coming into Hawai'i as a State? And that would allow us to then decide what actions we can take and how we could move forward. The truth is until the NDCs took place just two weeks ago, no one knew exactly where we're at. And why this is so important is this goes back to our Pacific neighbors, who were so pleased with Hawai'i adopting the Paris Agreement and the Sustainable Development Goals when the U.S. Administration withdrew, because we have a really important role with our Pacific Island neighbors, such as Tuvalu, Kiribati, Marshall Islands, Micronesia. And they look forward to partner with us. And when we were showing what we were doing and taking those actions, such as 100 by . . . *(inaudible)*. . . They then knew that Hawai'i was not forgetting . . . *(inaudible)*. . . Oceania as a Pacific large ocean nation, and being part of that 'ohana of Oceania. So the LDCs would be so valuable because then the Pacific Island countries would appreciate hearing from us. So there's a lot more I could

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share, but I thought I would just concentrate on that aspect, because then that looks at a process that's been supported around the world. There's a Aarhus Convention, named after a city in Denmark, but also an Escazu Agreement among Caribbean and Latin American countries focusing on public participation. Because as the people participate more, we have a much greater chance to achieve the Paris Agreement, even Glasgow. And the good news is we never know what happens, as was brought up, at the Federal level. We can't control that aspect, as much as we'd want to. So it's great for Maui to play a leading role throughout the Pacific and the world. And I can definitely say, being there, it's exciting to see Hawai'i represented in so many ways, with Governor Ige, with Councilmember King. Everyone is interested to talk to Hawai'i and see what we're doing. So it's also our chance to lead in a positive way for all the right reasons, and not just be seen as a tourism destination, but maybe a place, one day, where people come to learn about sustainability, and we share that. And I want to say I also just two things that were sent out of the Maui Pledge. And it was in two different venues. So you're doing a really good job to get that out about mālama and taking care. So hopefully this can add to that important dialogue. And there's so much more about COP, but I think everyone's still just trying to understand it. But I think the NDCs, the nationally determined contributions, and pulling it into a locally determined contribution would be a great way. And I do know it's University of Hawai'i, Maui that was mentioned, and it's great to see what's being done. We're also doing a voluntary university review in my class, where the students try to find the best examples of each of those 17 global goals. And Maui's featured prominently, as well as Leeward Community College. So I think that's an exciting way that we can engage more so it's...we look forward to hopefully having students participate, as well as community centers and NGOs as well. So mahalo, thank you so much for your time, and it's a pleasure to participate. And I'll stay on to hear the others as well.

CHAIR KING: Okay. Thank you so much for being here, Joshua, and for being such a great housemate. We did our negative COVID test every morning together, and that was...that was always a triumph to fail that test. But if you can stay on, after we get done with the panel, we'll have possibly more questions for you. And I love the idea of partnering on LDCs. You may be the first one to even be talking about LDCs. So I'll definitely follow up with you on that for the...for CARE Committee. So thank you so much, and we'll move on to our next...if you can stand by, we'll move on to our next presenter, who is Maria Tome, Managing Director for Energy Efficiency and Renewable Energy, State Energy Office. And Maria, are you there? Maria has also...

MS. TOME: I'm here. Hi.

CHAIR KING: Thank you so much for being here. Maria has also been in various other positions with Public Utilities Commission and kind of in and out of the State Energy Office a couple of times, I think, with DBEDT. Maria...I first met Maria, just to let you folks know, about 26 or, I don't know, maybe 27 years ago when we first did the grand opening of the Maui Biodiesel Plant. And she was...she was with child with her first son. So I always measure her oldest son against how old our company is. But great to have you on, Maria. I'm going to give you the floor now, and the next ten minutes are yours.

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MS. TOME: Thank you, Chair and Members. It's so good to see you. I'm Maria Tome, Managing Director of Energy Efficiency Renewable Energy, Hawai'i State Energy Office. Scott Glenn, the Chief Energy Officer, has not yet returned from the Climate Change Conference in Scotland, so I'm here instead. Thanks for inviting me. There's so much going on. I thought maybe I could just share a few points. Can I share screen?

CHAIR KING: Sure. Go ahead.

MS. TOME: And let's see. Oops. Is it showing up?

CHAIR KING: Yep. We have your first slide.

MS. TOME: Okay, cool. Well...

CHAIR KING: We do...we do see a little next slide component there. So I don't know if you want to...

MS. TOME: Oh, so it's got the wrong screen. Okay.

CHAIR KING: You might want to go to slideshow.

MS. TOME: . . .*(inaudible)*. . . Well, actually, it's...

CHAIR KING: And all your notes, just to let you know.

MS. TOME: Let me swap presenter view and...is that better?

CHAIR KING: There we go. That's it.

MS. TOME: Okay. See what happens when you rearrange things? It confuses the program.

CHAIR KING: You're the...you're the...you're the technology wiz. So I knew you...

MS. TOME: *(PowerPoint Presentation)* No, now I'm stuck...oh, gosh. Okay, so as Senator Chris Lee mentioned...let's see. Let me...forward button. All right. Our carbon negative goal here in Hawai'i, as quickly as practicable, and no later than 2045. And it's not net zero, it's negative, so that's consistent with the...with the theme there. This law, which was passed in 2018, is broader than Act 234 of 2007 because it goes beyond zero and does not exempt emissions from aviation. So let's see how we are doing. Printing? So sorry. There we go. So this is the latest greenhouse gas emissions report that's compiled by the Department of Health. It's for the year 2017, but it makes the point. That big blue section here is energy emissions the way they count it. And they leave out aviation. So actually, if you add in aviation, it's a higher percentage. But you know, you can see how important our energy choices are to our success in the greenhouse gas emission reduction effort. This next slide shows that almost half of our emissions are from electricity production, and over half of our emissions are from transportation. You can see once again both ground and aviation are big contributors. But we started in the electricity sector much earlier. And you know, we had the

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renewable portfolio standard, the energy efficiency portfolio standard. So let's see how we're doing. The renewable energy generation in Hawai'i by source is shown here. And you can see how the increase, especially in distributed PV, which is solar electricity, has been quite significant, but also important contributors are wind, utility scale potable tanks, biomass, hydro, biofuels, and geothermal...which of course, in 2019, due to the eruption, was down to zero and then just started up at the very end of 2020. So you say, yeah, that's Statewide. What about Maui? All right. Here we have Maui. So the renewable portfolio standard in Maui for 2020 was 51 percent. And that came from many sources, especially distributed PV and wind in 2020. And you can see where the biomass was a contributing factor, but then went down and is down...you know, down to basically zero. But biofuels are still in there. Hydro, there's a little bit. And this is only part of the story, right? So renewable electricity generation, but what about sales? So this slide shows...the top line, the purple line, shows total sales. And as you may expect, they went down in 2020, but distributed solar and total renewables did continue to grow. So this is the electricity picture. What about transportation? I only have one slide on transportation. In 2021 Session Laws of Hawai'i, Act 74, stated explicitly, shall be the goal of the State to reduce emissions that cause climate change and build energy efficiencies across all sectors, including decarbonizing the transportation sector. So as many other speakers have mentioned, transportation is a very important piece of our efforts. And we look forward to being able to speak more about successes in this area next year. I...others in our office are more qualified to speak on this topic. So I'll end my presentation here. And I thank you very much. And it's good to see you.

CHAIR KING: Okay. Thank you so much, Maria. Really appreciate that, and especially the information on Maui. Can you...are you able to stand by for questions at the end of the...

MS. TOME: Yes.

CHAIR KING: Okay. Thank you.

MS. TOME: . . .*(inaudible)*. . .

CHAIR KING: Yeah. I think Scott said he was going on vacation at the end of COP. So he's taking some personal time. But he was another person working really hard at that conference. Okay. So we'll move on. If you have any questions for Maria, please write them down. And Suzanne, are you here? Suzanne Case was going to join us around 9:20, 9:30.

MS. CASE: I am.

CHAIR KING: Oh, you are. Great, okay. We have Suzanne Case, who's the Chairperson of the Board of Land and Natural Resources, who also attended COP. And all the work that this Committee and the Council did to get the resolution on biodiversity for the Edinburgh Declaration done in time for me to be able to sign that declaration. I want you to know that Suzanne was there, and actually was given a speaking opportunity, had some very good important things to say about biodiversity in Hawai'i and what's

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happening in...are the endangered species capital of the world. So just going to give you the floor for the next ten minutes, Director Case, and happy to have you here.

MS. CASE: Thanks very much, Chair King. It was great to see you at COP26 carrying the flag for Hawai'i and Maui, and Senator Lee and Josh Cooper and others who were...who were there. I was very proud to be a member of Governor Ige's delegation. He had a very strong voice at the conference, and really did carry that message of, you know, number one, islands are kind of a microcosm of the world. And so we see what's happening and are working very, very hard to get to not net zero, but net negative, and in all of our...all of our layers of energy, transportation, reforestation, fleet conversion, all of that, and I know all of you are working really hard on it. And I feel very strongly that we now have very strong goals in place. And now we're getting to the really hard work of implementation. So I'm going to just share screen a little bit and talk about our piece of it that we're really focusing on. Let me see how to share my screen.

CHAIR KING: There should be a button at the top. It's the third button over that just looks like a computer screen, outline of a computer screen. That's the share screen button.

MS. CASE: Oh, yeah. Okay. Okay. Are you able to see that, carbon sequestration?

CHAIR KING: Yep, we've got it now.

MS. CASE: *(PowerPoint Presentation)* Okay, forest for life. Okay. So we...our focus is on reforestation as a critical part of getting to the equation of net negative. And...sorry.

CHAIR KING: Okay. I don't know, for some reason there's a black box in...

MS. CASE: Yeah.

CHAIR KING: Oh, you already...okay, now it's gone.

MS. CASE: Yeah. Okay. And so just real quickly, this is really a biodiversity slide, but it's absolutely relevant to our carbon footprint because this is...you know, before humans, we had all kinds of forest everywhere. And the current footprint is...not coming up. There we go. So you can see...I mean, if you think about what's happened to the world in the last 200 years, it's...we're burning up carbon. And this is what we have to reverse, both of our use of carbon and also to put back our carbon sinks. And you just saw this slide that Maria put up, and you can see that energy use is the biggest...is our biggest emitter. But the pink at the...at the bottom is our carbon sinks, agroforestry, and other land uses...sinks. And what we need to do is basically replace the blue with...shrink the blue, and also replace it with the pink. And that's what we are doing, or focusing on, through our forestry efforts. And so forest carbon is 75 percent of that sink. We also have urban trees as a critical part of that. And you know...as you know, as the world is heating up, one of the most important things we can do for our quality of life, and to create carbon sinks, is to plant trees in our urban areas. So these were our carbon sequestration priorities, the ability of trees to soak up...sequester carbon, take it in from the atmosphere and then sequester it in the...in the wood that grows. So we do that by protecting our existing forests, by planting more trees, and conserving

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more land that has good forest in place so that it doesn't also get cut down. So we did a...contracted the development of a carbon sequestration potential index for 257 of DLNR's land management units across the Hawaiian Islands. And so that...that's going to help us...help guide us with areas that are high potential for restoration and areas that are, you know, better suited to...for protection. So you know, on the right here we've got remnant forests that's really good for restoration, and the existing forest, because of a fence line, we want to make sure we protect. So we protected with conservation fences and by removing the hooved animals that have been introduced and destroy the forests. And protecting our forests in particular from rapid 'ōhi'a death now, because we don't want our growing trees to die. This is one of the most fascinating pieces of data that have come out in the last couple of years is those conservation fences that are put in place to protect our biodiversity to remove the hooved animals and keep them out also are protecting us against rapid 'ōhi'a death. And the reason why is because those animals basically eat the bark and rub up against it and create grooves in trees that allow the rapid 'ōhi'a death fungus to come in and infect the tree and kill it. So this is just so fascinating, and it's kind of a win-win because what we're doing already for biodiversity is also a protection against rapid 'ōhi'a death. This is another shot down from the Kahuku unit of Hawai'i Volcanoes National Park. You can see it's just fascinating data and very, very encouraging for our efforts. Through legal protections, we've got a goal in the next decade, I believe, to protect 46,000 acres of existing good forest through acquisitions and conservation easements. As you know, we've had some good acquisitions recently on Maui. And we want to plant more trees. Our current capacity is about 50,000 trees a year. And we have potential to plant a lot more if we can grow our capacity. So that's what we're focusing our efforts on. Some of the challenges is you do have to do the fencing up front, and they cost a lot. The land costs a lot. We have...we have to build our nursery capacity to do this. We have to be careful about biosecurity, and we have to make sure we maintain these fenced areas and maintain and care for our trees so they can get established. But we do have some great opportunities here. We've been highly competitive for Federal funding. We just got a grant from the USDA for planting an...tree planting with...through partners--this is not for the State, it's through the partners--for tree planting and invasive species control. We do have, because of our...you know, it's a tropical rainforest, and used to be. And so that's where the rain is. So we have a very high survivorship of planted trees, and also passive restoration when you...when you create the conditions for the seed bank to regenerate in the ground, we have high survivor...high growth and survivor rates too. And of course, we have very strong partnerships, particularly up in the forest. We have our watershed partnerships and our invasive species committees that are very, very active on Maui and throughout Maui County. So we've been able to plant 250,000 trees in the last four years for all the forestry species. So that's the overstory. And so that's been a great success, but again, we have a lot more potential here. So just a good example from Kahikinui and Nakua over in Leeward, Haleakalā. This...these are...I love these shots. These are before and after shots. So this is...this is what it started out looking like, and through a few years of efforts, active and passive...passive meaning you fence it and you get the animals out and you let the sea bank grow...and it really does regenerate. So this is...this is what the potential is. On the bottom, we have our current land cover and on the top, you know, with good efforts, we can...we can reestablish that native forest, the overstory and the shrub. And so it's very promising. We just have to do it. Here's some more before and after. This is 2009,

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this is 2015, and this is last...just last year. So same spot. And so it really is, you know, if you create the conditions, it will grow. And then lastly, again, our urban forests are a really important part of this. Our motto is the right tree, the right place, and the right care. And a lot of people are interested in doing this, and it...it's a win-win-win for our urban areas, and a big part of the carbon equation. And that's what I have. Thank you very much. And I will pause my...stop my share, and be available for questions.

CHAIR KING: Okay. That was excellent. Thank you so much, Director Case. And we have now joined our meeting by Yuki Lei Sugimura, who's the Councilmember for Upcountry, who just came from...she's kind of taken the lead on the axis deer issues. And she just came from dealing with some, I think, carcasses up there. So she may have some questions for you. So everybody, write down your questions. And are you able to stay for a little bit, Suzanne, until we get...

MS. CASE: Yep. Yes, I am. Yep.

CHAIR KING: Thank you so much. Okay. And just to let you know too, that we did fund a ReTree event on Maui with the Sierra Club in this current budget. So hopefully we can fold that into your State efforts too, and maybe even expand that use of funds.

MS. CASE: Terrific.

CHAIR KING: Okay. Next presenter we have...we're going to now transition from the State to the County, and we have Alexander de Roode--are you there, Alex--who's the Energy Commissioner from the...Maui's [sic] Office of Climate Action, Sustainability, and Resiliency --

MR. DE ROODE: Yes.

CHAIR KING: -- to give us his thoughts on priorities. And also, maybe you can update us on what's happening with the two open positions in your office. Okay. You've got the floor for the next ten minutes.

MR. DE ROODE: Thank you, Chair King, aloha. And aloha, Councilmembers. Happy to be here with you today. And welcome home from COP26.

CHAIR KING: Thanks.

MR. DE ROODE: Thanks for representing us out there. Yeah, I'm going to share a few slides with you this morning, here. Let me just get that going. All right. And presenter...no, not presenter view. Sorry. Okay. Is that...can everyone see my slides?

CHAIR KING: I think so. Can everybody...everybody else can see that? Yeah, thumbs up. We're getting a thumbs up.

MR. DE ROODE: *(PowerPoint Presentation)* Yeah? Okay. Sounds good. So I'll just give you a quick overview here. We are in the process right now of working on our greenhouse

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gas emissions inventory, both for County Municipal operations, so looking at the County facilities and operations, as well as at the community scale for Maui County. We don't have the data assembled yet and...nor the analysis completed. We're still collecting that on the municipal side from various Departments that have that data. And we're going to be looking at 2016 data, as well as 2019 data, and seeing what the trends are there. And then from there, we'll be able to calculate business as usual, if we just kept doing what we're doing, where would that take us in terms of greenhouse gas emissions out to 2045 or 2050, and looking at if we were to implement mitigation strategies, climate action strategies, where would that take us in terms of drawing down our emissions. So this is an example from the City and County of Honolulu, looking at FY 2019 data. And we will have, likely, similar data when we drill down into Maui County's data. But you know, we have...we...there'll be...there'll be slight differences. You can see here that building energy use is typically the largest emission sector for our municipal operations, followed by vehicle fuel use. So in terms of what are the biggest opportunities for us, it would be to reduce our energy use at the...in our buildings, our facilities, as well as reduce our fleet vehicle use and transition that to electrification where that makes sense, or other clean fuels where electrification may not be the best fit. So we're currently in that data collection and analysis mode, and we will be able to provide Council with an update as we start to get that data together. My next slide here is looking at the community scale greenhouse gas emissions. Again, this is an example from City and County of Honolulu. We expect similar breakdowns for Maui County, although we have, as we know, more rural makeup of our community here on our islands than the more urban O'ahu does. So it'll be interesting to see, you know, where there's some nuances, some differences between the two. But again, we see building energy use is a big chunk of the greenhouse gas emissions at the community scale--so this is beyond those County operations, but all emissions--as well as the transportation side. In terms of carbon sinks, we had both from Suzanne Case and others who've mentioned about the value of carbon sequestration from trees, as well as regenerative agriculture, and our soils as well. So as part of our climate action planning efforts, we will be looking at land use...or land cover, rather, data across our County and coming up with an inventory of how much carbon is sequestered in our soils, in our vegetative cover, our forests. And again, this is a...really, at this point, we're estimating with the best available data that we have. As we are able to collect more refined data and have better metrics on different sequestration properties of various tree species, for example, or different land covers, we'll be able to refine this analysis, but we should come, you know, to a pretty good estimate. That will also include looking at wetland areas and seeing the sequestration potential on...of wetlands. Last, but not least, and I don't want to spend too much time on this because this is a pretty busy slide, but this shows you--and I've shared something similar with you before, but this is kind of an updated format--the work of the Office of Climate Change, Resilience, and Sustainability out of Office of the Mayor. These are the various contracts we have out and the projects that we're working on. They range from resilience hubs to heat map index, developing a resilient housing guide, looking at opportunities for new renewable energy projects across our County, conducting a Countywide climate vulnerability assessment, working on level 2 public EV charging, developing that network. And I'm pleased to share with you that we recently released our energy savings performance contracting RFP on November 1st, so that process is underway. And hope that by sometime in January, the first half of January of 2022,

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we'll be able to have an energy services company selected to conduct an investment-grade audit of our facilities and then come up with energy efficiency measures, renewable energy, and energy storage project opportunities, as well as electrification of transportation measures that the County could pursue within its operations and facilities. We will be, as part of this effort, of our Climate Action and Resilience Planning effort, forming a group known as the CARPAC, the Climate Action and Resilience Plan Advisory Committee, and that...CARPAC will be meeting for about a six to nine-month period to help inform the development of the Climate Action and Resilience Plan. There'll also be other broader public outreach and engagement activities during that six to nine-month period. Our goal is by the fall of 2022, fall/winter 2022, that we would have completed our Climate Action and Resilience Plan and have a really strategic approach to how we're drawing down on the mitigation side, as well as increasing our resiliency or adaptation measures to climate change impacts within Maui County. So that's all I have for you today. I'm happy to stay on board and answer questions.

CHAIR KING: Okay. Can you...can you just give us a quick update on what's happening with the opening since Makale'a Ane left, and the third position that we funded in this current budget?

MR. DE ROODE: Sure. Yeah, so we have interviews underway and...for both positions. So the replacement of Makale'a Ane as Environmental Coordinator/Resilience Officer, and the second position, Green Building and Resilient Housing Specialist. So we hope to have those positions filled and the new individuals starting by mid-December to mid-January, sometime in that time frame, which is good, just in time for kind of kicking off the stakeholder engagement and public outreach around our Climate Action and Resilience Plan. So I welcome that addition to our team and our Climate Change and Resilience and Sustainability Office. And we'll keep you posted as that, you know, gets firmed up, but that's...yeah, what we're looking at right now, about mid-December to early January.

CHAIR KING: Okay. Thank you for that, and thank you for all the hard work. I know you're a one-man show right now, and that's a lot of work that you have to cover. I do want to let you know that I was able to bring up...in one of the panels I was on at COP, we had a very high-level official from HUD on that panel, and I brought up the fact that we are going to be looking at local building construction materials for housing, and she got very excited. So we're going to be having a follow-up meeting. So they're...you know, they're paying attention and they're really aware of what's happening with housing and housing needing to contribute to greenhouse gas reduction. So that's going to be an exciting...when you get that person on board, I think there's going to be a lot for them to do. Also, we...up next we have our Climate Action Advisory Committee, our volunteer group. So maybe we can eventually talk about fusing that group in with your CARPAC. But right now...so if you can hang around, Alex, and then Committee Members may have questions for you. And right now, I'd like to call on Darla Palmer-Ellingson. You there, Darla?

MS. PALMER-ELLINGSON: (*PowerPoint Presentation*) Aloha, Councilmembers and guests. I'm honored to speak with you today on three priorities to reduce greenhouse gas

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emissions. And this is also my last presentation of...as the Chair of the Climate Action Advisory Committee. It's a group of community members and professionals working in or concerned about climate change actions. Many CAAC members contributed to this briefing, and it includes specific recommendations for Maui County in the built environment, transportation, and carbon capture. I know we've talked through these subjects today, and I think the recommendations...you'll find there's some difference there. So I'm just going to jump right into building decarbonization. Building construction and operations are among the largest contributors to greenhouse gas emissions, as you saw. The good news is investing in climate mitigation solutions for the built environment is very cost effective. For every \$1 invested in efficiency saves \$2 in new electricity generation and distribution costs, according to World Resources Institute. And despite their extraordinary potential, 80 percent of economically viable energy savings in commercial and residential buildings still remains untapped. The CAAC Built Environments Subcommittee has a ten-page working document covering several elements of building decarbonization for Maui County. So I'm just going to jump right into recommendations. First of all, I want to talk about the 2018 energy code. As you know, the County will be adopting a new energy code by the end of next year, and you must adopt that code by State law, but each County can make amendments. This is a pivotal point to not allow anything to be amended out of the code and create strong guidelines, particularly in the areas of advanced energy efficiency, renewable energy generation, and building performance testing. Next, budget and personnel needs to be dedicated to code enforcement, which is currently lacking, so all contractors are operating on a level playing field and greenhouse gas reduction goals are achieved. To help ensure standards and codes are met, some of these tasks can be delegated to residential energy services network, or RESNET, contractors for things like code compliance inspections. Pardon me. And RESNET, I don't know how familiar you all are with it, but they already have a really robust network in place for such services across the country. Next, I want to jump to greenhouse gas reduction in affordable housing. We want to address the false narrative that we keep hearing that incorporating renewable energy and EV charging into affordable housing is too expensive. This is just not so. Immediately, and at a minimum, County supported affordable housing needs to be net zero capable with conduit for expanded solar and EV charging. You know, we've surveyed several professionals, and the estimate is this would add a minimal cost of construction of \$500. So it's...it just really is super important, and this would be in addition to provisions already in place for solar hot water heating and multi-unit EV charging. This would allow for either the homeowner or a Government-sponsored program to add these elements later without retrofitting. But we are also really hoping Maui County can do much, much more. Research has shown low income residents spend a large share of their incomes on energy bills, making it more difficult for them to afford necessities, such as food, or save money for the future. Using energy efficiency upgrades to reduce energy bills, while improving the quality of low income housing, is critical. So we recommend the Council task the Affordable Housing Committee to include energy efficient and water conservation equipment; renewable energy, including solar panels and battery storage; electrification measures, such as super efficient heat pumps; health and safety improvements; resilience measures, such as flood-proofing; and food security in gardening areas. And if this sounds familiar to you, right now, the Biden Administration is looking at funding all of the above, but as

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retrofits to existing affordable housing to save energy costs and meet climate goals. This would be much, much cheaper to accomplish with new built affordable housing than retrofitting, and it's a disservice not to look at the post-construction operating costs that these homeowners will face. I'm going to jump on to streamlining and prioritizing green building in the permitting process. The building permit process in Maui County is difficult, and that's putting it kindly. In discussion with industry professionals, we hear that reviewing permits takes far too long to make net zero affordable housing even viable. So solutions here would include the net zero housing factory. You've already approved a study. The Planning Department could also pre-approve a few plans for net zero accessory dwelling units, which would speed up the process for contractors. Los Angeles employs this type of program already. They have a really good working example there. Also, we would like to incentivize those who do more. So far we've been talking about doing the bare minimum in trying to reach greenhouse gas reduction goals in a built environment, but we should also talk about the ideal and how do we get there. We ask that you consider providing incentives for higher green building standards, including living building certifications, LEED certifications, and using renewable building materials. We learned from research during CARE-42 that the carrot Maui developers want for doing more than the minimum requirement on energy efficiency, resiliency, and renewable energy are these things: digital plan submission, so if we can accelerate the MAPS program and get that in place so that people don't have to manually walk plans from Department to Department; green building priority permit processing; and dedicated and trained Planning Department Staff to work on prioritizing net zero or better buildings. On the homeowner side, if there were incentives to encourage homeowner participation, that would be huge. One idea is a tax rebate that is tied to their green energy participation. I'm going to move on to my second topic, elimination of fossil fuels in transportation. So in 2020, almost 6 million tons of CO2 equivalent emissions came from ground transportation in Hawai'i, or 28 percent of all emissions generated in the State. Hawai'i has a goal of carbon neutrality by 2045. In 2017, all of Hawai'i's Mayors committed to 100 renewable fuel sources in ground transportation by 2045, and converting the County fleets by 2030. But reducing greenhouse gases from transportation does not mean replacing every gasoline and diesel vehicle with an electric vehicle. It also means reducing people's need to drive individually--that was talked about earlier today--and to get things done, reducing the VMT, or vehicle miles traveled, by providing options to safely walk, bike, take public transportation some of the time. Before we get into the solutions, I wanted to talk about some of the main obstacles for EV adoption have been the higher price of EV over a vehicle with an internal combustion engine, the lack of public charging infrastructure, lack of charging capabilities in housing, and the short driving range of early models. But prices on new EVs have come down, and the number of models is exploding. I mean, just this year has just been crazy. So while new models have more than enough range for Hawai'i, charging resources are still lacking, and there's no plans to meet the real needs. I know that we're working on it, but no plans so far. That's preventing most people living in multi-family housing from buying an EV, since they generally can't charge at home, and slow adoption among moderate homeowners. So what needs to be done in Maui County? With the State Energy Savings Performing Contract, some of these will already be addressed: so expansion of public transportation with electric buses, investment in public charging stations to complement the private networks where it's less profitable for them, and complete the

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conversion of the County fleet. So what that leaves is extending the State requirement for charging stations at public parking lots. Right now, Hawai'i County is considering this, including scaling up the number over time. In addition to that, we need to add funds and personnel for enforcement of the law. Currently, many parking lots that are required to have charging stations don't. So before we look at increasing that, we have to address enforcement; requiring all new construction to be charger-ready, including affordable housing; charging for parking, especially in visitor areas at peak times, to offset costs; providing continuously running electric shuttles in South Maui and West Maui on the coastal roads. We did have a network like that before, and if we could bring that back with electric shuttles, that would be amazing. Require that hotels over a certain size provide electric airport shuttles, and evaluate requiring rental company acquisitions to phase out fossil fuel models. And also coupled with that is lobbying the State to retrofit that car rental center to accommodate EV fleets. And here's the benefits. We know that rental cars are frequently rotated out of service. So since rental cars are turned over frequently, this will create a lower cost secondary market for residents, and that'll increase adoption. The third area that I wanted...

CHAIR KING: Darla? Darla, we're running out of time. So if you could maybe just real briefly give us an overview of the third area. And then we can . . .*(inaudible)*. . .

MS. PALMER-ELLINGSON: Yeah, I think...I think this one's pretty short. I just wanted to touch on carbon sequestration. And you know, we have a lot of conversation about reducing output of greenhouse gases, but less about carbon sequestration. And Suzanne Case mentioned earlier, reforestation is one very good carbon capture method, but we also need to talk about the soil. When agricultural soil is used as a carbon sink, not only is CO2 removed from the atmosphere, but soil significantly increases its fertility, and thereby improves food security. If 2 to 3 percent organic matter is added to agricultural soil over 2 to 3 years, an additional 40,000 to 60 gallons per acre water holding capacity is added. And you know, we know our soils are in crisis. 200 years of deforestation, monoculture, and poor farming practices, and overreliant on chemical inputs have stripped the soil of Hawai'i of its goodness, becoming less fertile each year. I'm going to skip some statistics I have in here, but you know, we did talk about earlier, many parts of Maui look like a desert unless we artificially water them, but it wasn't always that way, and we can get back to that. Advanced regenerative farming practices integrate animals and crops, introducing more trees and other perennial crops. I'm going to skip over my discussion about trees, because I think that was really well covered by Suzanne, and go right into proposed solutions for Maui County for carbon sequestration. You've already taken a big step forward by establishing the Department of Ag, and there have been also meaningful discussions with Maui's County's large scale ag producers. For the community, build understanding and grow the next generation of regenerative farmers by providing no cost education on how to apply methods and resources to backyard farming and small scale commercial farms. Include free follow up, including access to expert resources, and provide easily accessible and affordable purchasing resources for soil improvement, seeds, and tree crops. At scale, provide incentives to kickstart large producers like Mahi Pono and others in applying advanced regenerative agriculture practices for Maui County. Incentives could include property tax or sales tax reduction, priority permit processing for any development related to regenerative ag. And the last area is develop carbon

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credits for Maui County large scale regenerative ag and agroforestry producers. And I think it's really important that you guys investigate this, because carbon credits are really taking off. You know, it's kind of a double-edged sword because you're actually, you know, reducing someone else's commitment that, you know, they can't meet their carbon reduction and supplying that, but it just...it represents a huge potential economic benefit that could offset community program costs for some of these other carbon drawdown things that we're talking about. So think of the dollar signs. Industrial ag has a potential of 0.7 tons of carbon hectare per year, while regenerative ag has been show to sequester 15 times that amount. As carbon credits increase in value, this could be worth \$500 an acre a year as extra income, and the beauty in that is as the soils increase organic matter, their ability to retain water, survive drought, increases, and the overall production and resiliency also increases. And that's all I have. I know that we need to take immediate action, and we're not adequately addressing carbon sequestration, but by taking steps outlined for this and other areas, we can...we can reduce greenhouse gas emissions and help meet local and State targets. And I want to thank you. And again, there's a lot of people that contributed to this. I sent a copy to you with some names and notes for your reference.

CHAIR KING: Okay. Thank you so much, Darla. I think all of us represented here in this Committee have portions of what you just talked about in their...in our various Committees. So the report that you're sending will be really helpful. And Members, I...our Vice-Chair...our Committee Vice-Chair Sinenci had asked for a minute or two to just give a couple of thoughts from the WIR conference that he and Member Molina just recently attended. So if you'd like to do that for a couple minutes, Shane, then I want to quickly open it up. And hopefully, we can go until 10:40 and...with questions for the panelists. . . .(inaudible). . .

VICE-CHAIR SINENCI: Thank you, Chair. And mahalo for affording me some time for our report at the Western Interstate Regional Conference last month in Salt Lake City, Utah. Both myself and Member Molina attended this conference, and although the focus was on forest wildfire mitigation in the western States, I did attend a field trip to the northern Utah counties of Duchesne and Uintah Counties. These counties continue to frack for natural gas and petroleum products. And in fact, we were afforded a tour to all of the petroleum stipend funded projects within these rural counties. Utah has all of the mineral rights. So the stipends are funding all of their CIP projects. The natural gas and petroleum companies seek to build more rail and pipelines to coastal ports with the intent to, you know, send their product to world...to world markets. But I think their main obstacle are those democratic run states along the ports that support more green energy production. So those are just some of the highlights that we found that I personally experienced at the conference. So...yeah, mahalo for letting me share.

CHAIR KING: Thank you for that...thank you for that, Member Sinenci, and those are things that are coming up in the Energy, Environment, and Land Use Committee of NACo that, you know, more environmentalists are pushing back against. So appreciate what you brought back from that conference. So Members, we have five of the presenters still with us, and I'm just going to see if anyone's got any burning questions that you'd like to raise your hand and ask for any one of them. It's a...you know, all of this is a starting point, and I'm hoping that Members take away...Committee Members take

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away possible ideas for legislation or policy going forward for your various Committees. But if we can keep...I'll call on you as your hands come up, and then we'll keep it to two minutes if we can, starting with Member Molina, and then Member Johnson, and then Member Lee.

COUNCILMEMBER MOLINA: Thank you, Madam Chair. I'll ask a quick question right before we go to break, if we do get a break any time soon, but just want to...my question's directed to Ms. Case. I just want to thank her for that slide presentation. As they...as they say, a picture's worth a thousand words, but my question certainly won't contain a thousand words for Ms. Case, but nice to see you. Regarding the challenges that are being faced with regard to the impact invasive animals are having on newly planted trees, you know, the...are you...what eradication efforts are you doing to control these animals, besides the fencing?

CHAIR KING: Okay, Director Case? You...it looks like she's frozen. You might want to try turning...muting your picture and then turning it back on, but unmute your audio. Okay. So your audio's...okay, there we go.

MS. CASE: Okay. The basic way you protect forests in Hawai'i is to...is to basically reverse those invasive species issues as much as you can. So you fence, and you remove the animals that are in there, and patrol it and make sure you keep it...you keep it that way. And that's...you know, that's the work that's been going on for, you know, decades now, now that we know the damage they do. And basically what we need to do is accelerate that. You can control animals, but to keep...to keep...you know, to keep them out and to allow the area to regenerate, you have to fence. And so you know, we have...obviously, we have a big axis deer issue or problem in Maui County. You can't fence everywhere. You have to do other kinds of control, but you know, it's a...it's...the basic equation is to fence and remove...and remove them from the priority areas that you're working on.

COUNCILMEMBER MOLINA: Okay. Yeah. I can appreciate all the challenges you have to deal with, my goodness, but keep up the good work. And one last quick question, and forgive me for my ignorance. You mentioned one of your challenges is biosecurity. Could you kind of define that for me in layperson's terms and elaborate that challenge, what it is?

MS. CASE: Sure. I mean, our real issue is the rate at which new invasive species enter Hawai'i. And so we have to be able to prevent them in the first place, and then, early detection and rapid response. And if you fail at both of those, it's going to spread, and then you're into the ongoing control phase. And so you know, coffee berry borer, Coqui frogs, little fire ant, those are all...those are all, you know, past the prevention point and into the can we eradicate them locally point. And so that's the biosecurity issue. It's an issue for our forests. It's an issue for our lifestyle, urban life, farming, and the like. So it's an issue all around. But we do have...you know, our best opportunity is to...is to prevent introduction at our ports and airports.

COUNCILMEMBER MOLINA: All right. Thank you very much, Madam Director. Thank you, Madam Chair.

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MS. CASE: Thank you.

CHAIR KING: Okay. Thank you so much. And we'll...next, we'll go to Member Johnson, followed by Member Lee, and then...or who else? Member Sugimura.

COUNCILMEMBER JOHNSON: Thank you, Chair. This question's for Mr. de Roode. I know I only have a little short time, so pardon me if I interrupt you if the question's answered. So you made...you had a beautiful chart up there. It was pretty...like you mentioned, it was pretty busy, but there was something that came out of there that I really wanted to ask...bend your ear about. It said...you were talking about developing a renewable energy affordable housing guide. Do you have a status on that, like how far along is that guide, and can you expand a little bit on that?

CHAIR KING: Alex, are you still here?

MR. DE ROODE: I'm still here, yes. Yes, Councilmember Johnson. So that is a project to develop a resilient housing guide for Maui County to serve as a resource, both for builders, as well as homeowners or people looking to build a home. And it will be pulling from both indigenous knowledge here of housing and traditional methods of housing, but also combining that with modern approaches to make buildings resilient from disasters, for example. There is...the team that's working with us has done quite a bit of work in Puerto Rico around resilient housing and developing resilient housing guides for their communities. So that is in development. We've had...we're really in the pre-planning stage for that. We expect in January of '22 to start getting more concrete input from stakeholders and be able to have, you know, like a white paper come out and get some feedback on that. So that'll be over the next...by fall of '22, of calendar year '22, we hope that that guide will be released with significant input from our community.

COUNCILMEMBER JOHNSON: Okay. Thanks for that. And the other...on the same chart, you mentioned...let's see, where it says...when you mentioned about how heat index and ALICE populations and the strategies you guys have. And I think behind that concept is that folks who are, you know, struggling, you know, they need...they should...we should also help with them becoming carbon neutral and them having recyclable programs. And this can't just be for, you know, the big industries, what about the working folk, you know. So can you speak on the strategies that you were mentioning? You just had a little blip that said, here's the strategy. So I'm curious what the strategies are.

MR. DE ROODE: Yeah. So that again is another program we're kind of at the same stage as the resilient housing guide with that. We're in the pre-planning, starting to assemble data. We...the intent with that scope of work is to conduct an analysis. It's called a heat map index. So we're basically looking at, throughout Maui County, where are the pockets with the highest heat risks, both in terms of temperature, but also fire risk. So we're combining...we're looking at both heat from ambient temperature as well as...as well as fire risk, and we're overlaying that with data on ALICE populations. So where are our most vulnerable, most susceptible to negative impacts from heat and

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from fire, and then coming up with recommendations on mitigating that.

COUNCILMEMBER JOHNSON: Okay, I see. That's...thank you for that clarification. That really helps. Thank you, Mr. de Roode.

MR. DE ROODE: You're welcome.

COUNCILMEMBER JOHNSON: I don't have any questions now. Thank you, Chair.

CHAIR KING: Thank you, Member Johnson. I think the timer went off, but we're not hearing it for some reason. But we'll go next to Chair Alice Lee, followed by Member Sugimura, and then Member Paltin. You're muted still, Alice.

COUNCILMEMBER LEE: I have a question for Chair Case. Suzanne Case, are you still on the call?

CHAIR KING: She's here.

COUNCILMEMBER LEE: Oh, okay, great. How do you decide which areas to prioritize for reforestation and protection on Maui or in Maui County?

MS. CASE: Yeah, it's just a...you line up your priority areas with your opportunity areas. So I guess priority areas would be the remnant forests that are adjacent to our native forests and are accessible, and you know, where we think, between the amount of damage that's already been in the soil composition, you know, do we have a good chance of making a...making a difference. And the opportunities are, you know, what land is unencumbered, available now. Is it already fenced? Do we need to fence? And basically, do we have money to...money to do it? So...

COUNCILMEMBER LEE: So do you get your information or recommendations from the Maui Office or from County Government?

MS. CASE: Yeah. So this is the State Department of Land and Natural Resources. And we have lots of...you know, obviously we have a strong forestry program in Maui County, Division of Forestry and Wildlife. So they're, you know, the core partners in this, and they work...you know, they work with Maui County. They work with private landowners. They work with Federal agencies. And you know, Maui County's been a good...a good long-term supporter of the watershed partnerships, and contributing money. The Board of Water Supply has contributed money to those...to those efforts. And so it's...so we have really extensive data. We have GIS mapping capabilities. We have multiple layers that bring in land ownership, land use classifications, forest quality, and all that. So we do have very detailed mapping capabilities that help us with that, yeah. . . .*(timer sounds)*. . .

COUNCILMEMBER LEE: Okay. Thank you. Thank you very much. Thank you, Chair.

CHAIR KING: Thank you, Chair Lee. Okay. We'll go next to Councilmember Sugimura, followed by Member Paltin.

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COUNCILMEMBER SUGIMURA: Thank you. Thank you very much. So Chair Case, since you're up, I just want to say that on Maui we launched a axis deer task force, and I want to give credit to...which is Scott Fritz (*phonetic*), and under them are helping us a lot, which is Lance DaSilva and John Medeiros. And they are contributing, they are creating mapping, and they are fabulous. But I wanted to...I wanted to touch upon the...what the devastation that's happening on our island, Moloka'i, Lāna'i from the feral animal. They're eating away our environment, and I wonder if you have targeted areas that you're looking at, or are you just taking it as situations come up. I wonder what kind of mapping you have that can help us.

MS. CASE: Sure, and I know those guys have been working really hard to help out in this...in this effort, and will continue to do so.

COUNCILMEMBER SUGIMURA: Thank you.

MS. CASE. And they're available to do it. Yeah, our...I mean, our jurisdiction is the forest areas. Our direct jurisdiction is the forest areas under DLNR State land ownership. So a lot of the axis deer issue is, you know, private land, County land. We don't really have jurisdiction. We just really want to help out wherever we can, but we don't have direct jurisdiction. And you know, a lot of the problem is...as everyone knows, is on private land. And you know, the private landowners --

COUNCILMEMBER SUGIMURA: . . .(*inaudible*). . . helpful.

MS. CASE: -- may not, you know, have resources to do...have resources to tackle it as much as possible, but they do need help also. So you know, we're just trying to, again, help with whatever mapping and organization and all that that we...that we can to support those efforts.

COUNCILMEMBER SUGIMURA: And they've been great. So thank you...thank you very much.

MS. CASE: Great.

COUNCILMEMBER SUGIMURA: And then, I wanted to...I saw...if I could ask, Chair, one more question with Darla Palmer.

CHAIR KING: She's still here.

COUNCILMEMBER SUGIMURA: She submitted her written testimony, like a report, and I wanted to touch upon one of the things she said, which is...which ties, again, into this axis deer task force and what I'm learning about regenerative ag and the need for Central Maui to have a composting regenerative ag facility so that...as you know, you know, it's one thing to eat the deer, or pigs, or whatever, but then there's a whole process with what happens to the remains. And I just visited Gerry Ross. Is Darla here?

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CHAIR KING: Yes, Darla's here still.

COUNCILMEMBER SUGIMURA: Okay. I visited Gerry Ross, and what he's doing on his Kupa'a Farms just inspired me, and I hope that we walk down this path, but it's exactly what Darla's talking about, is to put, you know, nourishment back into the soil. And I was hoping you had more. I didn't get to read in detail about your...but if you have some information, I would love to get it, you know, as another email or whatever, just that thought in general. There's a huge need for...

MS. PALMER-ELLINGSON: Yes, definitely, I can do that. And we've got two really super people in our group that are very well versed in that area. And we can certainly provide you those resources.

COUNCILMEMBER SUGIMURA: Thank you.

MS. PALMER-ELLINGSON: And ironically, you know, I had worked on the project for getting rid of this or that way back in the past. I know that that's an issue as well that was mentioned. And yeah, the...we got...we got to focus on the soil.

COUNCILMEMBER SUGIMURA: Yeah.

CHAIR KING: So if you can send those resources to the Committee, then we can send it out to Committee Members.

COUNCILMEMBER SUGIMURA: Yes. Everybody, yeah.

MS. PALMER-ELLINGSON: I will.

COUNCILMEMBER SUGIMURA: So thank you. Thank you for your very detailed report, and thank you for your work. And is this your last report? You said you're going to go off as the Chair of this Committee?

MS. PALMER-ELLINGSON: Yes, I am. I've taken a private sector opportunity in sustainability and resilience.

COUNCILMEMBER SUGIMURA: Good job. Thank you.

MS. PALMER-ELLINGSON: Hopefully, you'll see me again --

COUNCILMEMBER SUGIMURA: Yeah.

MS. PALMER-ELLINGSON: -- in some other form. Well, I hope there'll be another...

COUNCILMEMBER SUGIMURA: Thank you. Thank you, thank you.

CHAIR KING: I know where you live.

COUNCILMEMBER SUGIMURA: Thank you, Chair. I've gone over my time, so thank you.

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CHAIR KING: Okay. All right. Thank you for that, Member Sugimura. And last, but not least, we'll go to Member Paltin. And then if we...I think we gave Member Sinenci an earlier chance to speak, but if you have any wrap-up questions, we'll go...we'll go next to you and then we'll take our break. Member Paltin.

COUNCILMEMBER PALTIN: Thank you, Chair. I just wanted to put this out there, either for Josh, Maria, or Suzanne. And I think Josh kind of...Joshua kind of touched on it, but it seems a little bit, to me, what it...was largely missing in the, you know, climate change mitigation and adaptation technologies is, being that we are an island nation or State, whichever you call it, is talk about managed retreat. And Joshua briefly touched on it, that some of the...our other sisters and brothers in Oceania are dealing with it. And in the context of Maria's presentation, where we're trying to be 100 percent renewable energy by 2045, just 5 years later, we're expecting one foot of sea rise, less than 80 years, 3 to 4 feet of sea level rise. And I think, you know, if we start managed retreat now, rebuilding hotels or homes, then we can build them as living buildings or meet goal, but if we continue to waste taxpayer and Government funds on small scale beach restoration or large scale restoration, that's monies that can be used for taking down and rebuilding. And just was wondering if anyone at the COP was talking about how to actually go about managed retreat and what happens to the shoreline after the buildings come down.

CHAIR KING: Well, thank you for bringing that up, because I did bring that up a couple of times in a couple of panel discussions I was on, that nobody was talking about managed retreat. So I used exactly those same words and talked about us needing to realign our roads along the shoreline and moving like the wastewater treatment facility, moving away from the sea level rise inundation zone, and some of the things that we're doing. But there was one question I had at one of the panels where somebody asked about adaptation, and that's where I started talking about it because nobody had been...you know, everything was focused on greenhouse gas reduction. So I guess that was the main focus of COP. So it did come up a little bit. I'm not sure if that was the focus of anybody else's...maybe, Suzanne, were you...did you get any of that discussion in any of the sessions you were in?

MS. CASE: I was in a session on the Ocean Acidification Alliance, and so that's more the deep...the deep water and the impacts to our coral reefs and the like. And you know, I think sea level rise is such a...is such a big issue. Managed retreat is very difficult. It's...and exponentially more expensive than other ways of protecting the shoreline. Obviously, we don't want to harden our shoreline. So small scale beach restoration is actually a...in the...in the medium term, the life of buildings term, is a good solution, and...in certain areas, whereas, you know, tearing down a building that's going to cost, you know, hundreds of millions to move inland. And sometimes there's no option to move inland. So it's not...I mean, it's a great concept. In application, it's very, very difficult. We should've done it a hundred years ago. So it's a little hard to do that retroactively, and we're just going to have to pick our best options for each location as we...as we muddle through this. It's a very hard situation.

CHAIR KING: Thank you for that. And Joshua, you've got...did you have a response to that?

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Oh, you're on mute still. You need to unmute yourself.

MR. COOPER: All right. Can you hear me now?

CHAIR KING: Yep.

MR. COOPER: Great. So I would...I would say...I was in a meeting as well, and I appreciate Case's statement as well, how difficult it is. And it's great to see everyone using the same language. I would say the best example of how we can learn from our Pacific neighbors is Fiji, because they've already started removing communities to other locations. And they really did a human rights based approach, where they met with everyone in the town, in the village, and then discussed with them, and they've already moved three villages so far, as well as one school. So I think that's a good aspect is that, since we do participate with Pacific Island nations, we can see how they're doing it and see it as a best...look for most promising practices as we all face common challenges. So...but Fiji, so far, was the best people-centered approach, where it wasn't just, you have to leave and moving them somewhere. There was a whole different type of land that they don't normally know how to grow on. There really was a consultation, like a free . . .*(inaudible)*. . . form consultation, and then working together on the best way to move, and then how to assist them once they have moved. So I think Fiji, so far, is the best model, but great question, and look forward to continuing the conversation.

CHAIR KING: Thank you so much. Okay. So you know, that might be something we need to...we need to proffer to Moloka'i next, because so much of Kaunakakai is below sea level. And we touched on that when we did the Community Plan review, but there are a lot of...a lot of buildings being moved already, first starting with the base yard. So thank you, Members. If there are no other burning questions, I would like to defer this item. And you know, we have...we obviously have some great partners here, and I hope that some of you who are already formulating possible policy or ordinance proposals will contact these folks directly.

COUNCILMEMBERS VOICED NO OBJECTIONS

ACTION: DEFER.

CHAIR KING: And we're going to go into our ten-minute break until 11:00. If there are no other questions, we'll thank all of our panelists so much, because some of you we just contacted since we...since I got back from COP, and you graciously agreed to join us for this conversation. So this is a springboard, and we really appreciate all the information brought to us. We're going to...Members, go...it's 10:49. We'll take our break until 11:00, and we'll come back and we'll hear the presentation from the PUC and from HECO, and then we'll go into questions from there. But stay tuned, and again, we'll...this is just the beginning. So thank you, everybody. And for those of you who were at COP, it was so great to be able to have that presence together in the various sessions. Okay. So right now, at 10:49, the Committee is on break until 11:00 a.m. . .*(gavel)*. . .

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RECESS: 10:49 a.m.

RECONVENE: 11:01 a.m.

CHAIR KING: . . .*(gavel)*. . . Okay. Will the Climate Action, Resilience, and Environment Committee please come to order? Don't know if I...on screen, if I shared my background with everybody, but if you can see the billboard...these types of billboards were all over Glasgow during COP, and this one says, urgently phase out fossil fuels or slowly phase out the grandkids. So there were...that was one of the...that was one of the less gory messages that were around, but there were a lot of protest messages and just billboards everywhere, organizations like *The Guardian*, who are no longer supporting fossil fuel ads and companies that rely heavily on fossil fuels. So there's a lot of pressure on the market as well.

CARE-1(7): COMMUNITY BASED RENEWABLE ENERGY (RULE 7(B))

CHAIR KING: Okay. Members, we'll come back to order for the...CARE-1(7). And Staff, do we have all our presenters for our second item with us?

MS. MILNER: Yes, Chair, I believe they're all here.

CHAIR KING: Okay, great. Okay. So Members, today we will be receiving an informational presentation on the community based renewable energy program from Hawaiian Electric Company and the Public Utilities Commission. We have with us today Greg Shimokawa from Hawaiian Electric Company, Mike Wallerstein, who's with the Public Utilities Commission, Mark Wong from the Hawaiian Electric Company, and Alexander de Roode is here as well, the Energy Commissioner from the Mayor's Office of Climate Action, Sustainability, and Resiliency to present to us. And we will take questions after the presentation. So if there are no objections, I would like to designate Mr. Shimokawa, Mr. Wallerstein, Mr. Wong as resource persons according to Rule 18(A).

COUNCILMEMBERS: No objections.

COUNCILMEMBERS VOICED NO OBJECTIONS

CHAIR KING: Okay, great. Thank you. We have already designated Mr. de Roode. So we'll now entertain discussion on both greenhouse gas reduction and the CBRE program. I think all of our panelists are here, and if there...also if there are any questions for Department of Environmental Management, I believe Mr. Nakagawa is here too. Are you here, Eric?

MS. MILNER: Hi, Chair. He was here --

CHAIR KING: Oh, was he?

MS. MILNER: -- but once we deferred CARE-4, he logged off of the meeting.

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CHAIR KING: Okay. So we'll turn the floor over to Mr. Shimokawa from Hawaiian Electric Company. I'm not sure if everybody is presenting or just yourself, Mr. Shimokawa.

MR. SHIMOKAWA: Good morning, Chair.

UNIDENTIFIED SPEAKER: This is...go ahead.

MR. SHIMOKAWA: Mark Wong from Hawaiian Electric will be leading the presentation.

CHAIR KING: Okay. So we'll start with Mark then. Go ahead, Mr. Wong.

MR. WONG: Thank you, Chair. Thank you, Committee, for the opportunity for us to present. I'm going to go ahead and share my screen, but as I'm doing that, just some quick introductions. My name is Mark Wong. I'm a manager in our customer energy resources area at Hawaiian Electric, and it'll be my team that will be...will be managing the community based renewable energy program. With me as well, as mentioned, is Greg Shimokawa. He's the manager in our energy procurement area, and they'll be responsible for making out the RFPs for CBRE. So just going to get my...

CHAIR KING: Okay. And while you're doing that, Mr. Wong, I will mention that I was asked to speak on one of the panels about the importance of goal setting, and I talked about the HCEI, the Hawai'i Clean Energy Initiative and the Governor's 100 percent renewable. And it was very timely because just the week before, your company had announced that you were going to be 70 percent renewable by 2030, which is the goal of HCEI. So setting that goal helped us...helped us...helped us reach the goal. And that was the point is, you know, we don't necessarily always know how we're going to get there, but if we set the goal, we'll find a way there. So I really appreciate your company coming out with that announcement because, for me, it was very timely, but also it proved the benefits of setting goals. So...okay, I'll give you the floor now.

MR. WONG: *(PowerPoint Presentation)* Thank you, Chair. So as mentioned, we're here to talk about the community based renewable energy program. It's also called shared solar. We had...when we started reaching out to community groups and talking with folks, folks really had a hard time understanding what CBRE is. And so shared solar is more of a generic industry term that's used in other jurisdictions, such as like on the mainland. Go ahead and go to the next slide. Let's see. So I think you know us, Hawaiian Electric. We are now collectively called Hawaiian Electric. So you may be more familiar with, you know, calling it MECO, but we do service the Islands of Maui, Lānaʻi, and Molokaʻi. The CBRE or shared solar program will exist in all of our islands that we service. So it's a...kind of a novel concept that we find that a lot of communities and leaders aren't too familiar with. So we thought it'd be helpful just to go over the basics of shared solar and go over some of the general terms and how it works. So real quick, how does Hawaiian Electric shared solar work? You know, there's a lot of solar resources available, especially here in Hawai'i, but only about 1 percent of that energy is harnessed. So you know, as you know, we have many rooftop solar programs, a lot of utility scale projects out there that captures this energy and benefits our customers. And the main benefit is with reducing your electric bill, but you know, as mentioned,

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we also share our clean energy and carbon goals as well. The problem is that most of us don't own a roof in...especially, you know, in urban areas where, you know, folks are in condos or apartments or areas where maybe a customer's rooftop isn't structurally safe to put a solar system in place, or they live under a shaded area. They haven't been able to participate in this renewable energy movement, and so there is a strong element in shared solar to provide equity so that all customers can participate and realize the solar savings. So kind of the magic of shared solar is that we're opening up a program...there's actually currently two phases. We have a Phase I of a program, which is operational today. We do have a small shared solar...or CBRE project on Maui in Kahului, it's a 28kW project. And we have another project on Moloka'i, a 250kW project, that we're hoping to get online next year, working with the developer. But now we have Phase II, and we're sort of at the beginning of that. And what we're looking for is procuring renewable energy projects. And one of the key groups that we need in this program to make it work is what we call a subscriber organization. So this is a developer, this is a community organization, a church or a hui, that gets together and decides to become a subscriber organization. And they will build, finance, develop, and interconnect renewable energy projects. So with our shared solar program, this could be a...more of like a utility scale project in open land, or it can be a rooftop. It, you know, could be a church that has a few extra acres or perhaps some rooftop space. Or it could be a shopping mall that has a...has a parking canopy and wishes to site a solar project on that. So once these projects are built and on the grid, what they can do is they can sell subscriptions to the second group that makes this happen...is what we call subscribers or any Hawaiian Electric customer. They have to participate in a project that is on the island that they live on, that's one of the requirements of the program, but some of these projects are up and running. These subscriber organizations can choose their subscribers. Hawaiian Electric isn't part of that interaction, and one of the key features of this program is that contracts or agreements between...are strictly between subscribers and subscriber organizations. The utility is not involved with that. And so a community organization or a subscriber organization can choose to pick up subscribers that live in that community, that live near the project. Or if it's a school, it could be the parents, the families of the students, or it could be people who live around the school, just as long as it's on that same island. So the project is interconnected, just like any other renewable energy project, and it delivers electricity to the grid. And that electricity services all customers. One of the key components of CBRE is that subscribers are...they receive bill credits through their existing electric bill. So if any one of us were to choose to sign up for a shared solar project, we wouldn't have to change and receive an extra bill. You keep on getting your Maui Electric, Hawaiian Electric bill, and then you'll see a line item bill credit that will offset your energy usage. So that's why we call it solar without a roof--that's another industry term--and enables all of our customers to potentially realize the savings of renewable energy, and realize a 100 percent clean energy world. Just to kind of visualize what this looks like...so I have here just an illustration of a solar project. And you can see that many different families, small businesses, apartment complexes can purchase a portion of this shared solar project, but down on the bottom, there's a really large portion. And that's something that we introduce in Phase II of our program. It's the concept of an anchor tenant because we found that developers with some of our larger projects wanted some more financial certainty of success. So kind of like a shopping mall, where you have an anchor tenant there, it kind of gives stability, having

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a large tenant in place. So that concept was borrowed by our program. So we do allow for large entities, commercial customers, businesses, to purchase a large portion of the facility. We did want to balance that, though, with providing benefits for the people who need it the most. So in our program in Phase II, we require at least 40 percent of a project has to go to residential customers, but balancing that with a developer's interest in making these viable. We also have...

CHAIR KING: Can you give us . . . *(inaudible)* . . .

MR. WONG: Oh, go ahead.

CHAIR KING: Mark, just back to the other slide. Can you give us an example of what one of these...like take the Johnsons. What would the Johnsons have to pay for that section, and how much would they expect to save on their electricity bill?

MR. WONG: So the shared solar program is designed to be open. So it encourages many different business plans and models. The model that we first conceived of is sort of analogous to rooftop solar, where you would have an upfront payment, and you pay that to a subscriber organization, and you just realize the savings from the system as if it was on your own rooftop. But you know, obviously, a lot of folks don't have that sort of capital laying around. So one of the business models is a pay as you go model, like a lease. So we're really hoping that subscriber organizations will look at these models on the mainland. Pay as you go is pretty dominant. So some subscriber organizations offer no upfront payments. So there's no...nothing that a subscriber has to pay up front, but they may charge a fee to...you know, collect money from the subscriber for the actual subscription. But the idea is that the subscriber will still net out with savings. And so the creativity and business planning, we...the program relies on subscriber organizations designing that, but in other programs, we've seen somewhere around 10 percent energy savings, even with a pay as you go model.

CHAIR KING: After your costs? Okay.

MR. WONG: So you know, that's a good segue into this next slide because one of the targets for the program is low to moderate income customers, and you know, these are the folks that need the savings the most. So in the program, there is carve-outs for low to moderate income projects, and that means that that project will commit to having the entire 100 percent of that project go to low to moderate income customers. So there is a separate RFP for that. They have to be projects...you know, larger size projects. And we sort of had similar concerns when we did stakeholder outreach that for...like say you had a 3 megawatt LMI project. It's going to be really difficult for them to completely fill that project with subscribers and manage that subscription. So we also have the anchor tenant feature for LMI projects, but you know, it's hard to say like a Best Buy doesn't really qualify as an anchor tenant in an LMI project. So we opened it up so any 501(c)(3), Government entity, really any organization that services LMI communities, they could participate. So Hawai'i, you know, Food Bank could buy a subscription in an LMI project. And so we thought...again, that was another way to strike a balance and give opportunities for these type of customers to sign up. So some of the things that Hawaiian Electric is doing...as I mentioned, the key part is getting these subscriber

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organizations. So we're trying to recruit developers and subscriber organizations. I'll show later in the slides, we have a website where there's a video somewhat similar to the presentation I've given here with additional information. The program is...currently, we're looking to release our Moloka'i and Lāna'i RFPs first, next week. And there's an underlying tariff that approves this program. There is some community engagement that's happened in recent months, and we hope to release RFPs for the other islands fairly soon. In the meantime, we also have a dashboard on our website, and we also have a separate portal, CBRE portal. So like I mentioned, there was three like groups, so subscriber organizations, subscribers, and then there's the utility itself. And in our program, Hawaiian Electric's role is that of an administrator. So in order to facilitate that, we created a CBRE portal, which is at communityenergyhawaii.com, and this is the place where subscribers can go and they can shop around for a project to sign up with. They can create a quote, and then they can actually sign contracts with the subscriber organizations in these portals...or in this portal. And then it'll also facilitate the issuance of bill credits to their electric bills. So that's live now. And kind of to provide a little more insight for Maui, I'd like to hand it over to Greg Shimokawa to go through with an update on where we're at with the RFPs. So Greg, if you're ready.

MR. SHIMOKAWA: Thanks, Mark, and thanks, everyone, for having us this morning. I would just like to talk a little bit about the RFP portion of...for the shared solar program, and like Mark described, some of the methods of how it all works. There are really two parts...two sides to how we're approaching it and getting people signed up. For our smaller projects, once the program opens, there'll be...subscriber organizations will be able to sign up and get processed, and go through the process of being qualified and getting their projects approved. For some of the larger projects and, you know, focusing on Maui Island in particular, we're going to be running requests for proposals, a competitive solicitation for the best CBRE project. And so what's been approved is two separate RFPs for Maui Island, one taking 12 and a half megawatts, either through a single project or for multiple projects. And then for a project...a project or multiple projects specifically focused on the LMI market, there's going to be a separate RFP with no cap on size for that. So like Mark mentioned, we're hoping to have those RFPs approved and ready to issue. Currently...we're currently going through a series of outreach and community meetings similar to this one and taking feedback that we can review and incorporate into our final drafts. So overall, we're intending for projects out of these RFPs to be in operation by the end of 2026. That's a relatively normal time frame to run through the whole process. Programs will be open to solar and solar paired with storage projects. The RFPs will be evaluated for the greatest value to customers and to the system. Mark, you can go to the next slide here.

MR. WONG: All right. It's taking a minute to go. There we go.

MR. SHIMOKAWA: Okay. So like Mark mentioned, there's...there were two phases, and he talked about the project in development in Phase I. In Phase II, we do have these two RFPs that I talked about. And for the smaller project, less than 250 kilowatts, that's to the program...first come, first served kind of program. And then we have RFPs available in this first chance. And shortly after we run these first RFPs, there's just...the plan is to have a second allocation of another 12 and a half megawatts available to our...to our second CBRE RFP. So there'll be several opportunities for both

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subscriber organizations and for the customers to be participating in this program. And we're really just getting started in that whole process. And the last slide please, Mark. But speaking of process here, there's quite a few steps that go from when we, you know, start to once we get the project online. A lot of that is kind of in conjunction in working with our regulators, with the PUC, to get this project approved and online...to get the program approved and online. So where we are right now is we're in the process of getting regulatory approvals for the RFP. So we've been going back and forth with drafts, taking feedback from stakeholders. It's getting to the point where we do have final RFPs approved and issued, and you know, like Mark mentioned, we're close to having those approved for Moloka'i and Lāna'i. So we're not quite there yet for Maui Island and the other...and the other islands in our territory. So once those RFPs are approved, we'll have...they'll be actively open for developers, submit proposals, and then we'll go through a evaluation process at Hawaiian Electrical, and there's multiple evaluators and some other experts across the company to evaluate these proposals. We'll get down to a short list, priority list, we'll ask for . . .(inaudible). . . investment final offers, and then finally end up with a final award or multiple awards of projects. After that, there'll be a negotiation with these contracts, and in this part we do require in our process that the selected developers hold some public meetings and do some outreach in the communities where the projects are going to be located. And then once those contracts are signed, they do need to be, for the most part, approved by the PUC. And once that approval is gained, then they can go into construction and development, you know, and then online and in service, you know, giving benefits to subscribers and to customers. So there's quite a few steps. There's multiple phases for engagement, for comments. So we are very open to that. We encourage folks to be participatory. And you know, we're excited to get these...get the program going. That's it for my part, and thank you. Thanks, Mark.

MR. WONG: Thanks, Greg. This is the website I mentioned, hawaiianelectric.com/sharedsolar. We also have an email inbox--sorry--sharedsolar@hawaiianelectric.com. That actually goes to my team and my inbox. So I'll be happy to take questions there. If not, I think I saw a chat, if you know, anyone wants to submit there, and we'll be available at the end of this meeting for additional questions. With that, mahalo, everyone, for your time. Thanks for your interest in shared solar. Chair, you might be on mute.

CHAIR KING: Sorry about that. I just wanted to thank you for your presentation. And your information filled in a lot of holes for me for what I didn't know about CBRE. Maybe Members might be interested to know if there's a potential for the County participating in this. If we could save 10 percent on our electricity bill, that's pretty huge for us, but maybe...we'll wait until we get to Q and A. Maybe you can respond to that later. Do we also have a separate presentation from the PUC, Mr. Wallerstein?

MR. WALLERSTEIN: No, I didn't intend to make a presentation.

CHAIR KING: Okay. So you're just here for questions if we have questions about the presentation?

MR. WALLERSTEIN: That's right.

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CHAIR KING: Oh, okay. Okay, so we'll move into, then, questions from the Committee Members. And we'll start with our Committee Vice-Chair, Shane Sinenci. I'll put you on the clock for three minutes.

VICE-CHAIR SINENCI: Okay. Thank you. Thank you for the presentation, Mr. Wong. Yeah, I just had a...and mahalo for working on getting us to...moving us, the County, forward. I guess my question was, I only saw some of your...the graphics with the towers on them. So I was wondering, just as...I totally support shared solar, but as far as the physical infrastructure, will we...is there a need for added physical infrastructure like more towers? Or you know, in the past there's been...we've been . . .*(inaudible)*. . . about maybe possible underwater cables or something. Are we sharing that energy with some of the other islands?

MR. WONG: Yep. Thanks for the question. Because the...you know, there is no infrastructure between islands, the energy would stay on the island. We also get asked if, you know, say you lived on Moloka'i, could I buy a subscription on Maui? And currently in the program, that's not allowed. A Moloka'i resident would have to buy a Moloka'i, and a Maui on Maui. So there's not a build method to do that. We do recognize the needs for infrastructure upgrade, especially if you...someone were to build a project...you know, very remote area or an area with highly saturated circuits. And so there is an element in the program for Phase II for things like grid services, including battery energy storage, that can alleviate the need for infrastructure upgrades. And you know, we recognize that the cost of connecting to the grid can be high, the interconnection cost can be high, especially on circuits that are crowded. So we are working on, and have been working on, improvements to the interconnection process to reduce those costs and alleviate the need, particularly for developers to shoulder the burden of any infrastructure upgrades, but also to open it up so that more projects can be brought online.

VICE-CHAIR SINENCI: Thank you. And that brings up my next question. We get a lot of calls from Upcountry, Kula area, where...when there's strong winds. All the trees...you guys all know, whenever we get the calls from up there about the downed power lines. So is there plans to create smaller cells or satellites within those areas that have...because I know for Hāna, sometimes if we get an outage, our generator might kick in or something like that.

MR. WONG: Um-hum. That's a good question. Not in CBRE specifically, other than the...what I mentioned about good services and energy storage, but . . .*(timer sounds)*. . . we also have a microgrid program...a microgrid services tariff that was released this year, and we're embarking on a Phase II of that as well. So we're hopeful that microgrids can help us with the resiliency problem. A lot of this, again, was born out of the legislature, such as...CBRE was, such as things like hurricanes. In California, you've seen a lot of wildfires and disruptions in service. So we have a similar mandate to look at the resiliency. So I think a microgrid program and how that unfolds in Phase II would be helpful to address some of those concerns with the high winds.

VICE-CHAIR SINENCI: Oh, that's great news. Thank you, Mr. Wong. Thank you, Chair.

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CHAIR KING: Okay. Thank you, Vice-Chair Sinenci. So we're going to go back the opposite way. So we'll start with Member Sugimura, see if you have any questions.

COUNCILMEMBER SUGIMURA: Thank you. I'm thrilled to learn about this because I guess we used to call it, in the olden days, wheeling, to try to connect use, or to share use. And a very good example of, I think, a project that would totally benefit--I wonder if we're doing this--is the UH Maui college has that whole field of solar panels. It used to be our parking lot for events and different things that we would plan in the community. Anyway, that whole field is now filled with solar panels. And across the street is our housing project, our housing for, you know, those in need. So can they now share and can the County benefit, then, from that field of panels across the street? And how does that happen?

MR. WONG: Yeah. Good question. Technically speaking, CBRE is not wheeling, but it does offer the opportunities, you know, like I mentioned through the bill credits. One thing about the program is that it has to be a new project. So you know, if it's an existing facility, in the current program, there's not a way to convert that into a CBRE project. But if a new project were to be created, then the opportunities may exist for, you know, other entities to buy into that.

COUNCILMEMBER SUGIMURA: Okay. Sorry I used the wrong terminology, but in my layman's term, that's the way that it would make sense to me. So sorry. Especially, when you have PUC listening. So my deepest apology.

MR. WONG: No worries.

COUNCILMEMBER SUGIMURA: But I do...so you're saying only new, which I thought. So that's why I asked the question.

MR. WONG: Yeah.

COUNCILMEMBER SUGIMURA: Because all of our County buildings are existing, except maybe the one that we just built, and that's built already. So all of our County facilities would not be able to benefit from this program?

MR. WONG: No, the solar project has to be new. So if you were to build a...you know, a CBRE project, you know, on the rooftop of a new building, or offsite on open land, that would be okay.

COUNCILMEMBER SUGIMURA: That's encouraging, because, yeah, Alex de Roode, earlier presentation, was talking about the RFP they have coming out for County facilities and seeing how we can be more energy efficient. So maybe there's some creative thinking that can happen in the long run. But thank you very much. I'm really thrilled to see this and the progress you have made. Thank you.

MR. WONG: Thank you.

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CHAIR KING: Okay. Thank you, Member Sugimura. No worries about the terminology. That terminology, wheeling, has more to do with new technology projects using the grid to put energy onto. I believe that was the terminology we were using back at the Hawai'i Energy Policy Forum. So next...we're going to go in reverse alphabetical order. So next we have Member Paltin, followed by Member Molina.

COUNCILMEMBER PALTIN: Thank you, Chair. Thank you, Mr. Wong and Mr. Shimokawa. I just was wondering, is there...for me, you know, Hawai'i is unique in there's only limited land space. Is there a way to ensure that, you know, parking lots and existing buildings get utilized before just raw land or, you know, unique habitat? Is there anything that we can do as a Council to encourage more solar rooftops in like, say, parking lots and whatnot? I mean, trees are great. We just had a little presentation about that, but you know, they attract birds, and you know what birds do on your car and whatnot. And you know, sometimes their roots uplift the pavement and you know, it just...I really love solar on the parking lots. And is there anything we can do in terms of legislation to encourage that venue before raw land or anything like that?

MR. SHIMOKAWA: Yeah, that's a good question. I can...I can take that. So I think it's always, you know, land use sorts of solutions that the Government can pursue, you know, to encourage development of behavior. But in terms of...from the Hawaiian Electric side, it leads to our requests for proposals. That's something that we're looking at and encouraging or giving a little bit more credit to projects that are, you know, not on raw land, if they're, you know, on already developed, you know, parking lot, impervious kind of land. So that...we're...you know, we've taken...we've heard that feedback elsewhere, and that's something that, you know, we are looking at right now.

COUNCILMEMBER PALTIN: I mean, even the County has parking lots, that, you know, if I could, I would just offer it up to you and maybe that could be our contribution in terms of land, or other things. And like Costco, they got way more parking lot than they have solars. Like keep going, don't stop. But yeah, let us know if there's anything we can do in terms of legislation or anything to encourage that more.

CHAIR KING: Maybe through the budget process to put out RFPs. Okay, well, thank you for that question. And just FYI, we all have...all those of us who have solar rooftop also have bird problems. We have...we have bird wars with our neighbor across the street to see who can keep the birds off of our house, because then they fly to the other house, and then their rooftop is all white. And so yeah, I don't know what the answer to that is, but if you have an answer to that, let us know too. Any other questions, Member Paltin? Okay. Thank you for that question, and next we'll go to Member Molina, followed by Member Lee.

COUNCILMEMBER MOLINA: Okay. Thank you very much, Madam Chair. And thank you, Mr. Shimokawa and Mr. Wong. Very interesting and innovative program you have presented to us. I'll try to put about three questions in one with the time allotted, so if you'll bear with me. First of all, are you currently partnering with any contractors, specific contractors or companies? And now regarding the energy procurement process, will it be the PUC approving the subscriber organization? And at this point, any ideas or thoughts as to how long this approval process will take as it relates to

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subscriber organizations?

MR. WONG: I can take the first part. With this program, we're dependent on the subscriber organizations. So we haven't partnered directly with anyone to build these projects. There is a carve-out for Hawaiian Electric to participate as a self-billed entity to propose a project. And we have a very strict code of conduct that we operate under for that. But we're largely looking for the market to determine these projects. So our role...we tried to, you know, describe the program itself and encourage folks to submit a bid. For small projects, like Greg mentioned, there's an application process. So we're hopeful we see a lot of community organizations and businesses in the community participate in that, and that was largely a mark of success for some...the...our similar programs on the mainland. But I may ask for Greg to kind of touch on the PUC approval and the timelines.

MR. SHIMOKAWA: Sure. So the way the program works is that for the small projects, like Mark mentioned, once the program is approved, the contract is also approved as well. So once the projects are vetted and make it through the build reviews from the Hawaiian Electric side, there's not any further regulatory...PUC approval required for that. So you know, as soon as they can, you know, get their drawing, get their plans together, then those projects will be good to move forward. For the larger projects, above a certain size, you know, those contracts, once executed, will need to get submitted to the PUC for approval, like any other power fixtures kind of contract. So that is something that, you know, adds a little bit more time. It's part of the process that's built in, and that's why we set, you know, at least for the RFPs, that 2026 offsite date for projects to be in service. So hopefully we can do, you know, much quicker than that, but just in terms of the larger projects and their development timeline, that's a more reasonable time frame. But I think we're expecting and we're hoping, definitely that small projects through the RFP and, you know, getting the smaller projects, through . . . *(timer sounds)*. . . Mark and his team's programs, to be available much sooner than that.

COUNCILMEMBER MOLINA: Okay. Thank you, gentlemen. And yeah, I asked this question because I can see this generating a lot of interest, and you know, if there's ways you can potentially streamline the process to prevent any bottlenecks, so to speak, you know, with people wanting to participate in this. So...but anyway, thank you very much, and thank you, Madam Chair.

CHAIR KING: Thank you, Member Molina, for the questions. Next, we'll go to Council Chair Alice Lee, followed by Councilmember Gabe Johnson.

COUNCILMEMBER LEE: Thank you for the opportunity, but I have no questions. Thank you.

CHAIR KING: Okay. Great. All right. Councilmember Johnson.

COUNCILMEMBER JOHNSON: Thank you, Chair. Thank you, Mr. Wong and Mr. Shimokawa, for your presentation. I really appreciate it, learned a lot. I got some questions quickly. So in the grid...that beautiful description of like, oh, these are

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the...this section of the solar panel is for this family and this section is for that family, you mentioned that 40 percent...if I'm correct, it's...40 percent was going to like a large corporation or a large customer? Is that...and then, can you explain that? Like I...you said something in regards to like that's why shopping malls have a big box store.

MR. WONG: Um-hum.

COUNCILMEMBER JOHNSON: I mean, that's kind of...I'm not really understanding that. Like is it just for payment? Is it like they pay for the folks who need it the most?

MR. WONG: Um-hum. Good question. So you know, we identified that we want low to moderate income and residential folks to participate in these projects. And I had mentioned that we do have a Phase I. We have two operational projects and four more projects that are on the way next year to go online. And what we found is the Phase I projects, the subscriber organizations primarily were targeting commercial customers because, you know, there's fewer commercial customers. They're kind of business to business, easier to deal with. And that's not the objective of the program. We really wanted to target those, you know, residential folks, but we didn't want to leave commercial out of the equation either. So the tradeoff for us was to impose a 40 percent requirement for residential. So these projects have to reserve 40 percent of their capacity for residential customers.

COUNCILMEMBER JOHNSON: Okay.

MR. WONG: And residential is defined by the rate. So you know, if you have a residential electric rate, you qualify as a residential customer. And if you're a...on a commercial rate, you know, you're treated as a commercial customer. So a Best Buy could participate as an anchor tenant. They could, in theory, you know, purchase that 60 percent, the remaining 40 percent, you know, so a really large portion of it. But you know, they would participate just like any other subscriber.

COUNCILMEMBER JOHNSON: Okay. Thank you, Mr. Wong. My time's limited so I'll move on to my next question. So the FIT, the feed in tariff, that is the idea, if I...my house has a little bit extra solar, I can kind of sell it back to the utility.

MR. WONG: Um-hum.

COUNCILMEMBER JOHNSON: Now, I'm Chair of Affordable Housing. I would love for affordable housing projects to have that kind of thing in the project. Would you guys support that, where you...the affordable housings would help make their...the utilities lower by selling back the extra energy they create to the utility?

MR. WONG: Yeah, for the affordable housing, that's actually one area that we're targeting. We think that there's a lot of opportunities, but not through a feed in tariff type mechanism. We would want all the benefits to go to actual subscribers. But may ask if Greg has any other thoughts on that.

MR. SHIMOKAWA: Sure. So feed in tariff, I think was a early . . .(timer sounds). . . program

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that was, you know, intended to promote adoption of PV and renewables. And so that model is kind of similar to the net metering model. We've sort of moved past that in its...in its previous form. And . . .(inaudible). . . several ways to...in a different way to get similar kinds of benefits to customers, to the customers that could use them.

COUNCILMEMBER JOHNSON: Okay. So it sounds like you're coming up with a better deal than that. Okay.

MR. SHIMOKAWA: Hopefully better for all customers, yeah.

COUNCILMEMBER JOHNSON: All right. All right, good to hear. I'm out of time, folks. So thank you. Thank you, Chair. Thank you for answering my questions.

CHAIR KING: Thank you, Councilmember Johnson. We were also just joined by our Council Vice-Chair, Keani Rawlins-Fernandez, who is our Moloka'i representative. And she was following the first presentation on Facebook Live, but the second one, for some reason, the streaming ended. So do you have any questions, Council Vice-Chair, because we are talking about these two projects on Moloka'i and Lāna'i?

COUNCILMEMBER RAWLINS-FERNANDEZ: Aloha awakea, Chair, mai Moloka'i Nui a Hina. I'm at the Molokai District Office by myself on this side of the office. Aloha, Mr. Wong and Mr. Shimokawa. Mahalo for your presentations. I guess...I wasn't able to watch the presentation. I'm not sure exactly how much you shared for the Moloka'i project. As for the Moloka'i project, going through the PUC and having Moloka'i Co-op being a bidder, and self-billed, not being able to bid on RFP for the Moloka'i project...did you share that?

MR. WONG: We didn't go into detail. I mentioned that we do have a Phase I--excuse me--project on Moloka'i. It's a 250kW project at Kawela Plantation, and that's under construction currently. And then we did mention that the Moloka'i and Lāna'i RFPs, we're looking to issue that next week, pending approval from the Public Utilities Commission. And I'm sure...Greg, do you have any other information you'd like to share on that?

MR. SHIMOKAWA: Sure. So for the Moloka'i date to pass that RFP...you know, it's had lots and lots of discussions and meetings with the Moloka'i community. So you know, our...about a week and a half ago when we did . . .(inaudible). . . our proposed final version of that RFP, that thought to, you know, incorporate what we could. You know, from those good discussions that we had and, you know, including...not allowing a bidding company...the company itself that proposed it to participate in that RFP. And so I think Mark said that that, per the PUC order, you know, those RFPs would be approved and ready to issue next week per our schedule. So we're looking forward to that moving forward.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo for that information. To...in response to Member Johnson's question, you talked about how the CBRE program was designed by statute to help those with a moderate income and those who weren't able to take

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advantage of rooftop solar because they're renters or they lack the capital, and that's why this shared solar program was created. And so with HECO, or you know, being...or HE, being in charge of manning this program, how are you folks helping to provide relief to low and moderate income and renters . . .*(timer sounds)*. . . through cost of transmission . . .*(inaudible)*. . . et cetera?

MR. WONG: Yep, that's a good question.

MR. SHIMOKAWA: I didn't get the last part of that question.

CHAIR KING: Who's answering? I'm not sure.

MR. WONG: Yeah, I think, Greg, it was, what are we doing to basically lower the cost for LMI subscribers. And one thing that we are doing in our proposals for LMI projects is looking for ways to lower the interconnection cost. So subscriber organizations with lesser cost to build the project and interconnect it would pass those savings down to the LMI subscribers and make the subscriptions more affordable. That's one way we wanted to address that and make it easier. We also expanded the program. So we made it as easy as we could for people to qualify as LMI. And we have, I think, 20 something...20 or so provisions. Like if you participate in Spectrum's, you know, bill assistance program, you could qualify as an LMI subscriber. We're also looking at loan programs, particularly with Hawai'i Green Infrastructure Authority and the GEMS program. They're proposing a GEMS for CBRE program that would benefit LMI subscribers.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo. And I'm happy to share that our Moloka'i Co-op did qualify and was granted a reservation in the GEMS Fund for \$7.5 million.

UNIDENTIFIED SPEAKER: Wow, that's great news.

MR. WONG: Awesome.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo, Chair.

CHAIR KING: Thank you so much for joining us, Member Rawlins-Fernandez. And I think also the pay as you go you mentioned was also designed for the LMI sector. Is there a...is there a...I just have a couple questions. Is there a provision, say if a donor wanted to donate to a fund, that could help pay down the subscription for the LMI group? You know, now that Jeff Bezos bought four homes in my district, maybe we could go and talk to him and ask him to contribute.

MR. WONG: I think that's possible. We've seen that sort of model on the mainland. We're not privy to all the business modeling that potential subscriber organizations are entertaining, but sort of a subsidization or, you know, potentially charging more expensive subscriptions for folks and providing lower cost subscriptions is something that we're hopeful subscriber organizations will look into.

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CHAIR KING: Okay, great. And then the other question I had earlier...I think Member Sugimura asked about participation in building these projects, but if the County wanted to participate as, say, an anchor tenant somewhere, would there be a potential for that? I wouldn't want us to do that at the...you know, to supplant any of the LMI subscribers, but if there...if there was a project that was looking for an anchor tenant, and we could save 10 percent on our electricity cost by doing that, would there be a way for the County...you know, would we be able to do it through the Council, or would we have to do that through the Administration?

MR. WONG: Potentially. More technically, it's based on the electric account and where the meters are located, but on a regular, non-LMI project, you know, anyone can participate. It's just the LMI projects where we have the restrictions for --

CHAIR KING: Yeah, we wouldn't want to...

MR. WONG: -- 501(c)(3).

CHAIR KING: Right. Yeah, we wouldn't want to supplant any of the LMI folks, just as a thought of a way...we have such high energy bills for the County buildings. So okay, Members, we're coming to the end of our meeting time. Does anybody else have any burning questions for either the PUC or HECO? If not, we'll thank you gentlemen for your presentation and for giving us a better understanding of the CBRE model. I feel like I am more able to speak to it now after hearing the presentation. And I think you also presented earlier to the CAAC, the Climate Action Advisory Committee. So these are things too, that moving forward, like say on Moloka'i or Lāna'i, Councilmembers may want to contact you and ask you to do some town hall or something to bring you in to explain this kind of information more directly to the public who's involved and what their opportunities are for savings. And with that, I will thank you very much. And now I'm going to defer this item. So we might ask you back again when things start progressing so maybe you can explain to us how the process is going, if that's okay.

MR. WONG: We'd be happy to do so.

CHAIR KING: Okay, great. Thank you, Mr. Wallerstein, for being with us today as well.

CARE-1(8): UNITED NATIONS CLIMATE CHANGE CONFERENCE (RULE 7(B))

CHAIR KING: And so Members, we're at the top of the hour. I'm not going to...I think I'm going to defer our third item, if there's no objections.

COUNCILMEMBERS VOICED NO OBJECTIONS

ACTION: DEFER.

CHAIR KING: I think we talked a lot about what happened at COP through our first presentations and some of my comments. And I will be making...I will be trying to write

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up a written report because I think it's really important to put that on the record for our Council, as well as for the County. And so I will...maybe, Chair Lee, if you can add that on as something for our next Chair's meeting, I can...that will give me a deadline. I think I'm going to work on it right away anyway, before I forget some of the stuff that I learned, but would be happy to...I really want to just keep you all informed on all the work that went on over there with the State of Hawai'i and for the County of Maui. And with that, I think we can go ahead and adjourn. We...let's see. Did I...I think I did defer this current item, the CBRE. So if there's no objections, we'll defer this item as well, CARE-1(7).

COUNCILMEMBERS: No objections.

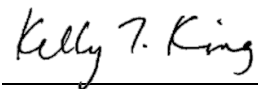
COUNCILMEMBERS VOICED NO OBJECTIONS

ACTION: DEFER.

CHAIR KING: Okay. And then, Members, if you can let me know if any of you decide to work on legislation for this Committee on any of the items that are pertinent, or if you are working on them for your own Committee, let me know. I will...I will make a commitment to start working on the issue of the LDC, you know, the local contributions, with Joshua Cooper, and...but if anybody's working on anything, we should...we should let each other know so that we don't double up efforts, because there's a lot of stuff to do. And if we spread out the work, it'll get done faster. Okay. And with that, we will adjourn, and again with my thanks, again, for all the good work you did while I was in Scotland and moving ahead with our...some of our biodiversity and environmental policies. We will reconvene at 1:30 under Chair Keani Rawlins-Fernandez at the BFED Committee. And so we'll see you after lunch. Aloha. . . .(gavel). . .

ADJOURN: 11:56 a.m.

APPROVED:



KELLY TAKAYA KING, Chair
Climate Action, Resilience,
Environment Committee

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Transcribed by: Brenda Clark

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CERTIFICATION

I, Brenda Clark, hereby certify that pages 1 through 46 of the foregoing represents, to the best of my ability, a true and correct transcript of the proceedings. I further certify that I am not in any way concerned with the cause.

DATED the 9th day of December 2021, in Wailuku, Hawai'i



Brenda Clark