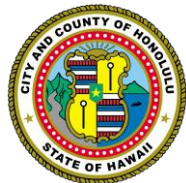


CLIMATE CHANGE COMMISSION

CITY AND COUNTY OF HONOLULU

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ROSIE ALEGADO, PH.D.
VICTORIA KEENER, PH.D.
BETTINA MEHNERT, FAIA, LEED AP O+M

Climate Change Commission
Tuesday, May 8, 2018
Council Committee Room, 2nd Floor
Honolulu Hale
530 South King Street
Honolulu, Hawaii 96813
Meeting Minutes

Members present: Rosie Alegado, Makena Coffman, Charles Fletcher, Victoria Keener and Bettina Mehnert.

Members Absent: None.

Public: Executive Director Josh Stanbro, Deputy Director Justin Gruenstein, and Uyen Vong (Office of Climate Change, Sustainability and Resiliency); Courtney Sue-Ako (Corporation Counsel); Aki Marceau (Elemental Excelsior); Jodi Malinoski and Dave Raney (Sierra Club of Hawaii); Henry Curtis (Life of the Land); Harrison Rue (Department of Planning and Permitting, Transit-Oriented Development); Nancy McPherson (State Department of Hawaiian Homelands); Kitty Courtney (Tetratex); Katy Hintzen (Hawaii Sea Grant); Anu Hittle (State Department of Land and Natural Resources); Will Giese (Hawaii Solar Energy Association); Katia Balassiano (Department of Planning and Permitting).

Call to order: Chair Makena Coffman called the meeting to order at 3:00 p.m.

Roll Call: All five commissioners were present. Quorum was established.

Approval of the Meeting Minutes of April 19, 2018: Vice Chair Fletcher suggested additions to the section "Presentation by Commissioner Charles Fletcher on Sea Level Rise" to clarify language that the origin of "3.2 feet" is from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report in 2014, with some other clarifications on nuisance flooding.

The minutes were adopted as amended (**AYE:** Alegado, Coffman, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None).

Report on the Activities of the Office of Climate Change, Sustainability and Resiliency (CCSR):

Executive Director Josh Stanbro presented the following report:

- A memorandum of understanding was signed between the City and County of Honolulu and the Drive Electric Hawaii coalition. All four counties have entered into the partnership.
- The City intervened in the Public Utilities Commission (PUC) performance-based ratemaking (PBR) docket. The PUC will look at the future of how rates are charged and CCSR's main interest is in the resiliency elements of the grid.
- CCSR participated in Elemental Excelsior's Earth Day Energy Summit. Elemental Excelsior commissioned a report called "Transcending Oil: Hawaii's Path to a Clean Energy Economy", which found that it is more cost effective to accelerate the rate of renewable energy adoption on island as opposed to the current schedule. CCSR is factoring elements of the study into the

Office's work.

- CCSR continues to conduct outreach and build a network of organizations, such as the State Department of Health, Emergency Management Professionals of Hawai'i, and engineering firms, who understand resilience issues and have been notified of the Commission's meeting schedule so they may participate.
- CCSR has been invited to participate in the Honolulu Harbor Master Plan, looking at issues of resilience and sea level rise into 2050 for this important node in terms of everyday operations, as well as post-disaster.
- CCSR has entered a partnership with Kupu on building curriculum for sixteen fellows from islands in the South Pacific for a Pacific Resiliency Fellows Program beginning in July.
- CCSR has finished phase one of the Resilience Strategy development. From the outreach conducted, the Office will be focusing on: cost of living on island, climate change, natural disaster preparedness, and engaging communities. Working groups will be assembled to work on those areas over the next three to four months and provide policy and project recommendations.

Questions and comments that followed:

- Fletcher asked for clarification on if the focus areas and working groups were the outcomes of the surveys that had been done. Stanbro responded yes, and noted that the working groups will consist of some City department heads and individuals from the Resilience Steering Committee. A community meeting will also be held in June to allow the community to provide input, followed by a series of other community meetings around the island. Those interested can sign up for the Office's newsletter to find out where those opportunities will be.
- Alegado asked Stanbro to elaborate more on the engaged community aspect. Stanbro responded that there was a sense that resilience cannot happen from within the City alone, so the City wants to find ways to more effectively partner with communities to help leverage the good work that is happening and make sure the communities know what the issues are and how they can plug into the City.
- Coffman commented that it is interesting the City has joined Drive Electric Hawai'i and intervened in the PBR docket and looks forward to being updated on how PBR can look at electricity rates to better integrate electric vehicles.

Presentation on the International Council on Clean Transportation (ICCT) Study by Mark Glick, Hawai'i Natural Energy Institute:

- Coffman noted that Glick was asked to give a presentation because he was the director of the Hawai'i State Energy Office at the time when the ICCT study was commissioned. Coffman also noted that to her knowledge, the study is the most comprehensive study that has been done focusing on fuel use with Hawai'i's transportation sector.
- Glick introduced the Hawai'i Natural Energy Institute (HNEI), founded in 1974 and established in Hawai'i statute in 2007 working to help fulfill Hawai'i's mandated objectives in energy transformation.
- Glick noted that the original objective was to provide a reality check on whether the Hawai'i Clean Energy Initiative Transportation Roadmap was making progress and if its goals were realistic. The goal was to achieve 70% reduction of petroleum use in the transportation sector by 2030 with 40% renewable generation and 30% end-use efficiency reductions. This equated to 385 million gallons of ground transportation fuel use reduced by 2030. The goal would be achieved through reducing vehicle miles traveled (VMT) and incorporating renewable fuels, among other strategies.
- Glick noted that it is important to keep in mind that the transportation sector is two-thirds of the energy mix in the state, and ground transportation is roughly half of that two-thirds.
- The purpose of the ICCT study was to analyze a new set of transportation options and create new guidelines to reach realistic reduction goals in ground, marine, and aviation transportation while engaging a new, broad set of transportation stakeholders.
- The study was formatted by six sub-sectors: vehicle efficiency, VMT, electric drive vehicles, alternative fuels, aviation, and marine. Overall, there were 100 initial tactics investigated and 22

were recommended. Some tactics were not recommended because they were seen as politically unfeasible, were cost ineffective, or may need to be researched further, such as a VMT or parking pricing programs.

- The study showed that the impact of the 22 recommended actions would result in a 72 million gallon reduction in fossil fuel consumption by the transportation sector per year by 2030, which provided a reality check on the original goal of 385 million gallons. The ground transportation tactics alone would reduce 60-65 million gallons per year.
- Glick noted that there are many factors outside of state control, but which are critically important, such as federal vehicle fuel economy standards that alone has the potential to reduce 16 million gallons by 2030.
- Other tactics include rental car efficiency programs, vehicle retirement incentives for low income groups, and high efficiency taxes.
- Glick noted that transit oriented development in terms of VMT can have a massive impact of 23 million gallons per year, while action on electric drive vehicles plus alternative fuels would result in modest gains.
- Glick noted that there are enabling actions that are necessary to carry out clean energy objectives such as leveraging rental car fees to finance clean transportation programs and increasing the barrel tax to fund government action to support clean energy.

Questions and comments that followed:

- Keener asked Glick to elaborate on the most important state actions versus the most important county actions. Glick responded that out of the 22 tactics, only three could be impacted directly by the State Department of Transportation (DOT). He noted that many of the issues like land use, fuel use by fleet vehicles, and car registration happen at the county level. He suggested that more than 80 percent of the study's findings involve county matters.
- Fletcher asked if the report has been worked on since its publication in 2015. Glick responded that the next step was to build a roadmap with stakeholders, which languished after the onset of the legislative session and Glick's acceptance of the offer from HNEI. Glick noted that the road-mapping process would build in greater responsibility in pursuing the recommended actions.
- Fletcher asked Glick his opinion on if California will be able to maintain efficiency standards given the federal government's attempt to weaken them. Glick responded that he would be shocked and extremely disappointed if California was not able to persist and move forward as they choose.
- Fletcher asked if Glick would be willing to work with the Commission on a brief roadmap of five key steps for implementing the recommendations. Glick responded that he believes HNEI's director would be supportive of his assistance.
- Anu Hittle asked if transforming the state fleet and state legislation would help push things forward. Glick responded that targeting fleets is critically important, but the major fleets, i.e., buses, are county matters. He noted that state legislation can be impactful if supported by actual tactics.
- Coffman asked about the status of a VMT pricing pilot program. Aki Marceau responded that the State DOT received a four million dollar grant from the Federal Highway Administration to conduct a road user fee pilot program. DOT put it out to bid, but only received one response and is in the process of revising and putting it out to bid again.
- Fletcher asked Glick to elaborate on what it means to price parking. Glick responded that it is a premium to create disincentives in order to reduce VMT. Marceau noted that when it comes to car ownership, parking is relatively subsidized; therefore, pricing parking is a way to price the externality of driving. Fletcher asked if capturing the externalities required compensating the user in the form of enhanced public or mass transit. Marceau responded that while she does not know the exact method of compensation, it is absolutely required. Fletcher asked if the pricing could be a revenue stream for the compensatory transport mode and Marceau responded yes, but not in the way an additional carbon or fuel tax could be.
- Marceau noted that she is also the chair of the Sustainable Transportation Coalition of Hawai'i

- (STCH) and would be interested in working with the committee in identifying effective next steps.
- Marceau noted that within the last ten years, VMT has risen seven percent as a state, but at a more drastic rate of 14 percent on the island of Hawai'i and asked what role the state has in looking at VMTs on a county-by-county level. Glick responded that the state can be more transparent by providing clear data. Coffman noted that VMT and the economy go lock step and in coming out of the recession in 2010, VMT has grown. Marceau noted that VMT is highly connected to tourism and Alegado noted that it might be worthwhile to parse out the difference between residential and tourist VMT.
 - Henry Curtis noted that Life of the Land currently has a climate change case before the Hawai'i Supreme Court and has been involved in a PUC docket addressing climate change issues. He also noted that it is important to consider that the ICCT report considers tactics using ethanol and fracked natural gas, which may reduce regional emissions, but increases global emissions.

Discussion with the Honolulu Authority on Rapid Transportation (HART) on Matters Relating to Activities of the Climate Change Commission: Assistant Deputy Director of Planning, Environmental Compliance and Sustainability, Ryan Tam; and Sustainable Mobility Lab Manager, Ben Trevino presented HART's strategy on sea level rise:

- Tam stated that the purpose of the rail project is to provide rapid transit in the highly congested east-west corridor with the goals of improving corridor mobility, access to planned development in the second city, and transportation equity.
- The rail project started in 2005 and the first 20 mile alignment from East Kapolei to Ala Moana Center was selected in February 2007. A final environmental impact statement was done in June 2010 and a contract was signed with the Federal Transit Administration in December 2012 for full funding. Tam noted that this process has locked HART into the project with certain constraints.
- Tam stated that HART's strategy is to have public-private partners assess the available information on sea level rise (SLR) and identify options to incorporate into the rail project, such as raising station entrances and stairs, as well as provide costs of implementation. Tam noted that these features are not currently in the designs.
- Tam noted that a primary regulatory and design criteria is that the rail stations are engineered to be outside of flood zones. Based on a 2015 study looking at the criticality of structures over a 50 year design life, based on U.S. Army Corps of Engineers (USACE) estimates and SLR scenarios, a substation train control room near Kalihi Stream was relocated outside of the flood zone.
- Trevino noted that HART is looking to approach the project with the best information and an open mind to the types of solutions that are going to be necessary and would like to understand the bigger picture and the City's objectives.
- Trevino noted that HART provides an electrified vehicle asset that can play a role as a leader in working to reduce fossil fuels in the transportation sector.
- Trevino noted that equity in transportation is very important to HART and believes HART will play a role in increasing equity through additional capacity in transit.

Questions and comments that followed:

- Fletcher asked Tam to clarify flood zone. Tam responded that the flood zones are currently defined as the existing flood insurance rate maps. Fletcher noted that the flood insurance rate maps have not been updated and do not include SLR information.
- Fletcher asked if there is any language in authorizing documents that would require HART to take SLR information into account. Tam responded that HART contractors and designers have to create designs that are compliant with regulatory requirements and HART's strategy is to take whatever best information is available now and give it to the contractors to come up with designs that can meet the City's long-term objectives.
- Fletcher asked if using the USACE SLR model was motivated by legal requirements. Tam responded no, that it was just to understand what the potential impacts could be.
- Fletcher asked how long Tam believes the system's physical life will be. Tam responded that HART is planning on infrastructure lasting 50 to 100 years.

- Fletcher asked if HART is interested in looking at SLR information that goes beyond 50 years. Tam responded that he is unable to make that commitment but wants to work with the City and the Commission to identify the best information to incorporate.
- Fletcher asked if HART has looked at the Hawai'i Sea Level Rise Viewer. Trevino responded that HART has reviewed it and to the best of their ability matched the locations of the facilities to the area specified by the 3.2 SLR exposure area as a preliminary look.
- Fletcher asked how HART is considering the radius of blocks around the rail stations. Trevino responded that the locations of rail stations were selected with City objectives in terms of land-use and population changes, but HART is not in a position to answer questions regarding accesses to areas around the stations alone. Harrison Rue noted that questions would be more appropriately directed at the City and Transit Oriented Development (TOD), which does not have the answers yet, but is asking the questions.
- Fletcher asked what will trigger the direct address of SLR by the City. Rue responded that SLR is taken into account on a few key catalytic City projects addressing riverine flooding and areas partially inundated on the SLR viewer, such as in Iwilei-Kapalama and Pearl City. Coffman noted that the Commission would like Rue to present on TOD projects.
- Coffman asked if HART is involved in a comprehensive parking strategy and the rate commission. Tam responded that HART is not involved directly and the rates will be set by the rate commission.
- Coffman asked if there had been any greenhouse gas calculations since the environmental impact statement. Tam responded not yet, as the initial calculations were to differentiate between alternatives and an analysis of the contribution of rail in an electric mobility future is not targeted for HART's purpose.

Discussion and Action/Adoption of the draft Climate Change Brief:

- Fletcher noted that the intent of the brief was to provide a short, peer-reviewed accounting of the observed impacts of climate change with some projections of impacts. It includes a global outlook based on the projection of a 16 percent rise in greenhouse gas emissions by 2040.
- Fletcher noted that he sees the brief as a statement by the Commission that it is data-driven and sees the impacts of climate change—past, present, and near future—as extremely severe.
- Keener suggested the inclusion of an initial statement at the top of the brief to outline the reasons for the global scale. Fletcher included the statement, “The Honolulu Climate Change Commission in order to establish the factual basis and broad impact of climate change adopts this climate change brief to delineate at the global scale inclusions of the peer-reviewed scientific community with regard to impacts in various sectors. A companion brief elaborates on regional impacts.”
- Keener noted that information on the state scale might be more impactful than focusing on the global aspect. Fletcher responded that there could be a follow-up white paper expanding on the local impacts. Coffman suggested removing the “Global Outlook” section and elaborating on causes in another additional brief, which could be developed by an informal sub-group.
- The Commissioners discussed including all of the information as a short report versus as two to three page short white papers. Keener suggested short factsheets would be most effective. Mehnert praised the brevity of the document and its easiness to read. Mehnert noted that if the intent is to trigger action, it will be highly successful.
- Nancy McPherson suggested the inclusion of language in the “Ecosystems, Food, and Human Health” section to read, “Indigenous populations will be disproportionately impacted by climate change due to their stronger ties to place and higher resilience on natural resources for subsistence” and offered to provide a citation.
- Alegado suggested focusing more on the human element and moving up the “Ecosystems, Food, and Human Health” and “Hawai'i” sections. Keener noted that information can be pulled from the National Climate Assessment for indigenous and cultural sections. Fletcher suggested Alegado draft a cultural impacts section.
- Kitty Courtney suggested that the primary audience for the brief should be City staff with possible

inclusion of a provision for annual review and periodic update. Katy Hintzen suggested annually briefing elected officials, in addition to City staff.

- Justin Gruenstein noted that the charter that created the Commission set forth its mission to advise the mayor, city council, and City executive department heads. Keener noted that decision-makers will want to see City impacts relevant to what they are legislating, and Coffman argued for keeping all of the information in one document. Fletcher and Mehnert agreed.
- Coffman noted that it would be hard to get city level energy data, which is mostly at the state level. Will Giese suggested there is good island-by-island data for energy use, and Coffman clarified that she was referring to greenhouse gas emissions data, of which the power sector contributes only one-third, and how there is missing information at the county level.

Discussion and Action/Adoption of the draft Sea Level Rise Guidance:

- Fletcher moved to put the consideration of the draft Sea Level Rise Guidance off until the next full Commission meeting and solely take public testimony on the document.

Questions and comments that followed:

- Asia Yeary asked if it was possible to have GIS shape files for the 3.2 and 6 foot exposure areas readily available for decision-makers. Coffman noted that it would make the guidance user friendly.
- Katia Balassiano applauded the work of the Commission, but noted that the Department of Planning and Permitting (DPP) does not have the resources to implement the recommendations and asked for revising the language that puts the department in a difficult position. Fletcher asked if Balassiano could assist the Commission in drafting language to which Balassiano responded she is happy to work with the Commission.
- Kitty Courtney noted that she supports the recommendations and suggested there might be a way to phase them in so as to take them one step at a time.
- Dave Raney strongly supported adoption of the Sea Level Rise Guidance and noted that it is extremely important to look at the 3.2 SLR-XA and begin to implement it at the detailed level.
- Jodi Malinoski noted that DPP is in phase one of soliciting comments for the Land Use Ordinance update and offered that The Sierra Club is happy to work with the Commission on language that incorporates sea level rise and shoreline setbacks as they prepare to submit comments to DPP. Balassiano noted that the Land Use Ordinance is in regards to HRC Chapter 21, while many of the recommendations are in regards to Chapters 23 and 25. She also noted comments will be collected by June 11th.
- Harrison Rue thanked the Commission on the Guidance and noted that the recommendation of using the 6 foot marker as opposed to the 3.2 foot marker by the end of the century was jaw-dropping. Rue mentioned that he will be asking the TOD sub-cabinet for their input on the Guidance and noted that TOD has started using the 3.2 foot figure in thinking on infrastructure planning and permit approvals.

Public Input for Matters Not on the Agenda: None.

Next Meeting: The next Climate Change Commission meeting is scheduled for Tuesday, June 12, 2018 from 3:00PM – 5:00PM.

Announcements: None.

Adjournment: The meeting was adjourned at 5:05 p.m.