

CLIMATE CHANGE COMMISSION  
CITY AND COUNTY OF HONOLULU

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MAKENA COFFMAN, PH.D., CHAIR  
CHARLES FLETCHER, PH.D., VICE CHAIR  
ROSIE ALEGADO, PH.D.  
VICTORIA KEENER, PH.D.  
BETTINA MEHNERT, FAIA, LEED AP

**Climate Change Commission**  
**Monday, September 21, 2020 9:30AM**  
**Zoom Virtual Meeting**  
**Meeting Minutes**

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

**Members Absent:** None.

**Public:** Uyen Vong, Josh Stanbro, Matt Gonser, Nicola Hedge, and Michael Nguyen (Office of Climate Change, Sustainability and Resiliency); Courtney Sue-Ako, Noelle Cole, Harrison Rue, Layla Kilolu, Rachael Han, Laura Mo, David Arakawa (LURF), Dave Martin, Dave Raney (Sierra Club), Jakub Zielkiewicz, Linda Schatz, Mahealani Cavaco, Michael Iosua, Paul Bernstein, Piia Aarma, Rafael Lee, Ryan Kobayashi, Stefanie Sakamoto, Tim Hiu, Lauren Watanabe, Tracy Tonaki, Yvonne Yoro, and Joe Ferraro.

**Call to Order:** Chair Keener called the meeting to order at 9:31 a.m.

**Roll Call:** Five Commissioners were present. Quorum was established.

**Approval of the Meeting Minutes of August 20, 2020:** The minutes were adopted as written (**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:

- The climate situation is more dire and more relevant than ever with fires in California and fires in Ka'u on the Big Island. NOAA ran out of alphabet letters for storms in the Atlantic basin. 40% of our beaches are being threatened.
- The Resilience Office has continued to be engaged in the COVID-19 response; wastewater monitoring, and COVID-19 contact tracing in partnership with the State Department of Health (DOH).
- The Resilience Office has helped lay the groundwork for the new Office for Economic Revitalization to deploy CARES Act funding to help pivot the economy.
- The Resilience Office has helped develop a new CARES Act dashboard to show where the funding has been allocated to, contracted and spent: [www.oneoahu.org/dashboard](http://www.oneoahu.org/dashboard)
- Three key pieces of climate policy put forward in 2020: Bill 25 updates energy codes, and was developed by CCSR in partnership with the Department of Planning and Permitting; Bill 2 updates the land use ordinance on parking policy; Bill 65 codifies the roles and responsibilities of the Resilience Office, and will next be heard in the Council Committee on Budget.
- Regarding climate litigation, the City sued several of the biggest oil manufacturers; there have been positive rulings in the Ninth Circuit in sister cities. Two more states also filed lawsuits. A federal judge lifted the stay on the City's case, which is going to determine if it will move to state court or federal court.
- The Resilience Office is continuing to work on the City's Climate Action Plan, which is

- expected to be released in the next few weeks.
- Planning for the Climate Adaptation Strategy is in progress and will consist of a year-long process to protect lives and property given climate change impacts already being observed.
  - The Resilience Office is working on a transition project internal to the City to move towards renewable sources of energy by 2035. The contractor is meeting with different City agencies to determine how to best switch vehicles away from fossil fuels. The City should have three electric buses by the end of the year.

**Questions and Comments that followed:**

1. Commissioner Fletcher inquired about the argument that led to the stay in the climate litigation. Stanbro responded that in the Hawai'i State Court, the defendants (e.g. oil companies) asked that it move to federal court and argued that it is not a state issue. Because there were other municipalities that filed lawsuits ahead of Honolulu, in all but one of those cases, the Appeals Court ruled that the proper place for the case to be heard is State Court, which was a decision that was also reached by the Ninth Circuit.
2. Commissioner Fletcher inquired if a class action lawsuit would have been a more powerful approach. Stanbro responded that the idea was to keep each jurisdiction focused on localized damages as climate change impacts and costs manifest differently in other jurisdictions. Hawai'i will experience a wide range of effects that other jurisdictions may not experience.
3. Commissioner Coffman inquired about the decision to bring the One Water framework into Bill 65, and the role of the Resilience Office in running the One Water checklist. Stanbro replied that One Water requires a cohesive approach like Complete Streets, with multiple agencies co-designing and leveraging resources. Complete Streets found that a coordinating agency was needed. The Resilience Office will serve as the coordinating agency so there are dedicated resources and time to help convene that group and because it is a natural fit with existing climate adaptation work.
4. Dave Raney (Sierra Club) inquired about Hau'ula already experiencing king tide impacts and equity issues, and for a more formalized way of getting community input. Stanbro responded that those specific roads are owned by the State, and the City wants to work with the State on a shared response, a vision on how to respond to climate adaptation issues together. The City's climate adaptation strategy will be focused on City infrastructure and wherever it can dovetail with State initiatives. In terms of the equity question, the CCSR is looking to the Commission for their guidance as they complete their equity guidance document. CCSR also has an equity program and over the past year has worked on making sure that everyone's voice is included in policy decisions including the Hau'ula community.
5. David Arakawa (LURF) commented that the Land Use Research Foundation (LURF) and AARP were included in Complete Streets working group and would like to request that the working group for climate adaptation strategy also includes them. With respect to Bill 65, Arakawa would appreciate outreach and input from the construction, agriculture, tourism, building industries. Stanbro responded that his office looks forward to working with anyone and everyone, and added that the stakeholder engagement phase of Bill 25 included six to eight months of public engagement. Stanbro added that DPP conducted a similar process with Bill 2. Bill 65 is an internal City policy that aims to plan how to address climate change within the City and lead by example. Arakawa responded that while Bill 65 is internal, it has a big impact on external stakeholders because City departments have to work with those stakeholders and will be impacted by the resulting financial situation.

**Communication and Correspondence from the Public:** No communication or correspondence from the Public was received.

**Discussion and Adoption of the Climate Change Commission Annual Report 2019-**

**2020:** Alegado moved and Coffman seconded the motion to adopt the Climate Change Commission Fiscal Year 2020 Annual Report (**AYE:** Alegado, Coffman, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None)

**Discussion on Status of Climate Change & Construction Industry Guidance Document:**

Commissioner Mehnert presented the following:

- The intent of the paper is visionary; focused on opportunities and at the same time outlining critical need for action.
- Commissioner Mehnert would like feedback whether the scope might be too broad. The paper is not just looking at the construction industry itself, but the built environment as a whole.
- The construction industry generates nearly 40% of annual global GHG emissions. The global building stock is expected to double by 2060, about 2.5 trillion square feet in addition to the current building stock, which is the equivalent of adding an entire New York City every month for the next 40 years.
- There is a greater need of heating and cooling due to climate change, which increases carbon emissions. The energy required has a high cost, particularly in Hawai'i, because a lot of Hawai'i's energy comes from burning fossil fuels, which are imported.
- There are two types of carbon: embodied carbon and operational carbon, and together they contribute to the GHG emissions of the built environment. Embodied carbon comes from the manufacturing, transportation, and installation of construction materials. Operational carbon is what comes from a building's energy consumption – heating, cooling, and lighting needs.
- With the increase of energy efficiency, throughout a building's operation, the influence of embodied carbon becomes more important.
- Studies have shown that green buildings are healthier, perform better, last longer, and easier to maintain. In the long run, owners of green buildings save energy, save money, preserve the environment. It can also help the State's economy at the same time if suppliers and manufacturers that utilize local materials are prioritized. Using less energy and less water (limited resources) lightens the strain on the island's infrastructure.
- There are opportunities for developers. Policy can help provide guidance to developers; there has to be a dialogue, for example with sea level rise.
- In the paper, there is a section that highlights recommendations and considerations for DPP. Great progress has been made with regard to sea level rise, off-street parking discussions and tree canopy initiatives.
- Solutions that might work here include sustainable design strategies; material selection and project delivery method; on-site and off-site renewable energy; resilient design and community resilience; Complete streets
- Concrete plays a big role in Hawai'i, which has been leading in the development of concrete technology. Green concrete is sequestering carbon in concrete.
- Standards that are important to our work: policy; green building standards; 2030 challenge; ZERO code.

**Questions and Comments that followed:**

1. Commissioner Alegado inquired about ventilation design and HVAC systems as it relates to health issues and climate context and what the tradeoffs might be. Commissioner Mehnert responded that the solutions are a bit different. In healthcare, for example, their ventilation systems are meant to filter viruses, providing cleaner air, while other building types have not previously considered these options due to high costs. Engineers are currently looking at different kinds of filters. Designs are also changing, and schools have started teaching half of the curriculum outside. Offices and residential spaces will alter their designs to create more open space. COVID is touching every aspect in design right now. Commissioner Alegado inquired how to green an industry that might require retrofitting, which might increase costs. Mehnert responded that working from home will continue, which will keep cars off the road, and that adding a COVID component to our paper is a possibility.

2. Commissioner Coffman commented that if the paper needs to be narrowed down in scope, to focus on the embodied carbon and operational carbon segment.
3. Chair Keener stated that she agreed that the scope may be too broad. She suggested that if the paper focuses on embodied and operational carbon, then to pull out the examples such as the resilience hub into a box, which gives people examples while streamlining the body of the paper. Regarding the recommendations section, Chair Keener inquired of the Commission how high-level or specific they wanted the recommendations to be. Commissioner Mehnert responded that through the document, we strive to show collaboration with agencies, and as the scope is currently broad, specific examples on how we move forward are needed. Chair Keener stated that the Commission's guidance documents and that the recommendations are what the Council and Mayor review so we can consider what they would find helpful.
4. Commissioner Fletcher advised that Commissioner Mehnert focus on a specific area based on her comfort zone. The paper could also use an editor to remove jargon. There is a paper that was released by Harrison Rue at DTS titled, "Climate Adaptation Background Research: International Best Practices and Local Initiatives."
5. Commissioner Coffman stated that she supported the discussion about the Architecture 2030 and discussion around zero net carbon buildings; would be helpful to bring in more context about Oahu's electricity grid, to connect how zero net building systems could be integrated to the larger grid system.

**Comments and Public Testimony that Followed:**

1. Stanbro stated that the Resilience Office looks to the Commission for scientific guidance on how to address climate change through policy through mitigation and adaptation. Guidance on emitting the least possible carbon through building practices and designing buildings to withstand climate change impacts could be two separable areas. Having a policy recommendation from the Commission that shows products, policies and practices that should be adopted over time are helpful to see if there are ways to put them into policies, as state law mandates zero emissions by 2045. Regarding the conversation between COVID-19 and climate, the Resilience Office is working on a proposal that would help businesses retrofit their air conditioning systems and help pay for it through energy efficiency practices.
2. Linda Schatz inquired how will this study be used and the future steps when the study is finalized, and if the study being done was in conjunction with input from the construction industry, laborers, materials, suppliers, and other industries that could be affected. Schatz commented that the study could benefit from an economic impact analysis to understand the industry impacts and could recommend subsidy programs like federal and state tax credits. Schatz commented that the stakeholders that deliver housing and urban environment could be better included in the specifics and logistics in the policymaking and process. Chair Keener responded that the economic analysis may be beyond the scope of this paper, but the Commission might be able to recommend an additional study that would include the economic impact on the City and communities involved that would also reflect saved costs in pursuing these adaptation policies. Commissioner Mehnert stated that the plan to write this construction paper was announced. This paper is very broad and lays out the current conditions. We need to work with different stakeholders who have their own expertise to discuss what it will take for us to get to a carbon free environment.
3. Harrison Rue commented that the Climate adaptation research document that Josh mentioned is on the City's TOD website. The document can be found here: [http://www.honolulu.gov/rep/site/dpptom/climate\\_docs/Climate\\_Adaptation\\_Background.pdf](http://www.honolulu.gov/rep/site/dpptom/climate_docs/Climate_Adaptation_Background.pdf) There is a second document to be released titled, "Urban Design Principles" which includes what the City is doing regarding future regulations and the collective best thinking for adapting to climate.
4. Jakub Zielkiewicz inquired about considering incorporation of a carbon reduction target for the construction industry. Zielkiewicz also commented that in terms of cost considerations, economic impacts and potentially higher costs for using green concrete, that this is an opportunity to consider the externalities or costs that typically aren't considered in cost calculations, such as

avoided emergency room visits and the social cost of carbon. At the end of the day, society pays for these impacts so it is important to start considering these cost calculations. There are also potential impacts on jobs and industry, which would be helpful to include in a subsequent study. Lastly, best practices should be continued to be highlighted and flagged, such as the green concrete technology and green buildings mentioned. In addition, it would be good to include examples from other places such as updated building codes in Marin County, California and other incentive programs. Commissioner Mehnert responded that through the Architecture 2030 program, the design industry has a goal of net zero by 2030, and has outlined on how to get there, which will be elaborated upon in the next draft of the document.

5. David Arakawa commented that LURF supports the purposes of this paper to identify opportunities and its intent to not to be prescriptive as a discussion piece. He supported the stakeholder slide in Commissioner Mehnert's presentation and the idea that stakeholders need to work together. However, he is troubled with the upcoming document that DPP is releasing because stakeholders in agriculture, tourism, etc. have not seen this document. He encourages the Commission to reach out to stakeholders, as many recommendations can be regressive for the poor. Arakawa is in opposition to green concrete as there is only one supplier in Hawaii. He looks forward to seeing more training and seminars on these issues (green concrete and retrofitting air conditioning) and conversations with industry and how measures can be implemented in cost-effective manner. He commented that an economic impact statement on homebuyers and public would be helpful, and that maybe UHERO can assist with looking at the data. He commented that we need to find incentives for people and developers. He recommends that the Commission make permitted interaction group (PIG) to allow for more public input.
6. Chair Keener inquired from Uyen or Courtney on the reasons to put together a PIG. Courtney Sue-Ako responded that a PIG cannot exceed the number of people that constitutes as quorum, which is three members; a PIG of two people would be very limited. Chair Keener responded to Arakawa by acknowledging that these Commission meetings accept public testimony ahead of time and the public is invited to provide testimony at the public meetings.

**Public Input for Matters Not on the Agenda:** Chair Keener inquired of the Commission whether Bill 65 should be added to the agenda for the next meeting. Commissioner Fletcher inquired what the status of the bill would be a month from now. Director Stanbro stated that a committee will be reviewing the bill on October 21, 2020.

**Tentative Next Meeting Date:** The next meeting date is October 26, 2020 at 9:30AM via Zoom.

**Announcements:**

- Commissioner Fletcher requested to have someone from the State of Hawaii coastal zone management program to explain what the new changes are for changes are for 205A as a future agenda item.
- Arakawa commented that the industry would be interested in presenting how Bill 25 was amended to become more renewable energy-friendly at a future meeting.
- Commissioner Mehnert and Layla Kilolu will be presenting at the United Nations Global Compact, in a webinar titled, Malama Honua panel on September 22.

**Adjournment:** The meeting was adjourned at 11:30 AM.