

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 28, 2019
Mayor's Conference Room
530 South King Street, Room 206
Honolulu, Hawai'i 96813
DRAFT Meeting Minutes

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

Members Absent: None.

Public: Executive Director Josh Stanbro, Uyen Vong, Hayley Cook, Joshua Ferrer-Lozano, and Chris Cunningham (Office of Climate Change, Sustainability and Resiliency); Courtney Sue-Ako (Corporation Counsel); Deputy Director Tim Hiu (Department of Planning and Permitting); Jodi Malinoski (Sierra Club); Henry Curtis (Life of the Land); Jeannine Souki (Hawai'i Gas); David Arakawa (Land Use Research Foundation of Hawai'i); Wendy Miles; Bob Franco; Timothy Hiu; Yujiro Kuwabara; Kat Brady; Cole Hendricksson; Jeff Burgett; Paul Bernstein; Sherilyn Wee; Anthony Aalto; Randy Ching; Thomas Brandt.

Call to order: Chair Makena Coffman called the meeting to order at 3:03 P.M.

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

Approval of the Meeting Minutes of March 19, 2019: The minutes of March 19, 2019 were adopted as amended (**AYE:** Alegado, Coffman, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None.)

- On page 5, "Coffman also noted to get clarity on the initial intent..." amended to "Coffman also noted the initial intent..."
- On page 6, removed the word "artificially" from "shifting property values by creating a government insurance organization..."

Discussion and Action on the Election of Chair and Vice Chair of the Climate Change Commission:

- Commissioners praised the Chair Coffman and Vice Chair Fletcher for their leadership and suggested it continue.
- Coffman announced the Commission will revisit the discussion of leadership again early next June.

Alegado moved and Fletcher seconded the motion to approve Coffman as the Chair of the Climate Change Commission (**AYE:** Alegado, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None).

Mehnert moved and Alegado seconded the motion to approve Fletcher as the Vice Chair of the Climate Change Commission (**AYE:** Alegado, Coffman, 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:

- Nicola Hedge joined CCSR as the Climate Advisor, funded under the City's partnership with Bloomberg Philanthropies, and will be working on projects to decrease the carbon footprint of transportation. Chris Cunningham, who has deep experience in FEMA and state hazard mitigation work, joined CCSR to create a hazard mitigation program for the City and a long-term disaster recovery plan.
- CCSR moved offices and is no longer on the ninth floor of the Fasi Municipal Building. The new office is located on the second floor of Kapālama Hale.
- CCSR has secured year-long VISTA support for the Commission to assist with research. The VISTA program is an important career pipeline for youth to get exposure to experience in public service.
- CCSR found that codes were the most important, scalable, and foundational policy change for climate change mitigation and adaptation. The electrical code update went to city council and help standardize battery storage and photovoltaic (PV). The energy codes will be heard by the council in June and contain important elements for mitigation: readiness for electric vehicles (EV) and ensuring least cost for residents on utilities and water heating.
- The Resilience Strategy will be released on Thursday, May 30, 2019. It will be posted and available for the public to view on CCSR's website.
- Last month, CCSR created a sustainability report, which is mandated by charter. It is a very candid look at metrics CCSR will continue to track year after year. Stanbro asked the commissioners to review identify if there are missing or better metrics that should be tracked.
- Through CCSR's partnership with the Urban Sustainability Directors Network (USDN), the office held communications and equity workshops with USDN specialists Michael Shank and Kristin Baja. The workshops were well attended and provided in partnership with the three other counties.

Questions and comments that followed:

- None.

Presentation on the Hawai'i Greenhouse Gas Emissions Report for 2015 (published in 2019) by Dr. Paul Bernstein, University of Hawai'i Economic Research Organization (UHRO):

- Bernstein noted that consulting firm ICF developed the historical emissions from which the presented emissions forecast was developed.
- Bernstein commented on the importance of the report in knowing forecasted emissions to achieve Hawai'i's greenhouse gas (GHG) emissions reductions goals, specifically in relation to Act 234, which calls for a reduction in GHG emissions to 1990 levels or below.
- Starting from a historical perspective and to show a baseline of emissions, Bernstein showed 2015 emissions data in three aggregated categories: energy industries, transportation, and other. The data showed the bulk of emissions comes from energy industries. Disaggregated data showed within energy industries, electric utilities is the bulk and oil refineries represents a small percentage. In terms of transportation, the bulk of emissions comes from ground transportation, then domestic aviation, and then marine transportation. Bernstein noted that domestic aviation is not part of Act 234 and is harder for Hawai'i to act on, as opposed to ground transportation.
- Bernstein presented the non-transport emissions forecast, broken down into energy industries and other (e.g., substitution of ozone depleting substances and land use changes), which showed "other" emissions would grow with the state's gross state product. It was forecasted that these emissions would grow absent of energy efficiency improvements because there are not many regulations attached to them. The forecast for energy industries showed a rapid decline brought about by the Renewable Portfolio Standard (RPS) and HECO's Power Supply Improvement Plan (PSIP) and KIUC's GHG reduction plan. Bernstein noted that this forecast assumes the Big Island's geothermal plant is online, which it currently is not. He also noted that the PSIP assumes more optimistic deployment of renewables on the HECO system than what's being realized today.
- The aviation (domestic nonmilitary) transportation emissions forecast showed emissions rising over time. Bernstein noted that the growth in demand for travel outpaces energy efficiency

- improvements for planes.
- The ground transportation emissions forecast showed emissions staying flat due to growth of demand for travel and slow vehicle fleet turnover outpacing efficiencies in corporate average fuel economy standards. Bernstein noted that for heavy duty vehicles, the percentage of biodiesel in the fleet increases overtime to somewhat contain the rise in emissions.
 - Bernstein shared takeaways from the report:
 - Hawai'i is on track to meet the Act 234 goal in 2020.
 - Forecasting is subject to uncertainty. For example, if oil prices were to change dramatically, it could be expected emissions would decline as people respond to prices.
 - Substantial progress is being made in reducing emissions from the electricity sector, though future progress depends on rate of deployment of renewables.
 - The rest of the economy does not see large reductions and additional policies are needed. Bernstein noted that more than 3,500 economists have called for putting a price on carbon emissions, which would raise the price of all fossil fuels and incentivize people to reduce their consumption. The economists' statement in the Wall Street Journal called for a carbon fee to rise over time and to give all revenue back to citizens. Bernstein noted that giving all revenue back eliminates regressivity of the policy, because when returning revenue in equal shares, the wealthy get back the same amount as the poor although they put in more money than the poor.

Questions and comments that followed:

- Mehnert asked what the mechanism for giving revenue from a carbon fee back to citizens would look like. Bernstein responded that it could go through existing government programs to take advantage of existing systems and lower the administrative burden.
- Alegado asked for the rationale that the wealthy are putting in the same amount to the carbon fee as the poor. Bernstein responded that the wealthy are on average putting in more because the wealthy contribute directly through consumption of fossil fuels, but also indirectly through higher consumption of goods and services. Alegado noted that on O'ahu, rural people actually pay more in direct costs. Alegado asked if there were projections specific to O'ahu. Bernstein noted that there is general household data that shows the poor spend a smaller amount of money on goods and services.
- Keener asked what the greatest uncertainty is in future projects and where the City or state may have control. Bernstein responded oil price and penetration of technology.
- Fletcher asked if there are examples of where a carbon tax has been in play for a few years. Bernstein responded that both British Columbia and Sweden have carbon taxes and the conventional economic outcome holds that by putting a price on carbon, there is a reduction in emissions via a reduction in demand for fossil fuels. Bernstein noted that Sweden's tax is high but very narrow, covering only a limited number of sectors. He suggested the fee should be economy wide so that emissions from the combustion of all fossil fuels are covered as best as possible.
- Alegado asked if anywhere had implemented a carbon tax with other legislation and if that was the case in France which resulted in the yellow jacket protests. Bernstein responded that in France, the policy became very regressive because all of the revenue stayed with the government. Alegado asked if British Columbia and Sweden's carbon taxes returned revenue to citizens. Coffman responded that British Columbia has a flat dividend. Henry Curtis added that British Columbia initially gave the money to residents and businesses, but over time, the refunds increased to businesses at the expense of residents.
- Fletcher asked if there are examples of carbon tax policies that have built in more social justice to recognize excess burdens of those least able to pay, rather than a flat carbon tax that gets distributed back. Bernstein responded that economics would say the best way to help people is just to give them money that they can decide to use however they feel is in their best interest.
- Bob Franco commented that it will be important to distinguish who will receive the return, i.e., citizens versus residents. Bernstein responded that there could be many different versions of the policy where money goes back to people (households, citizens, or residents), to businesses, to government programs, or to research and development in renewable technologies.

- Anthony Aalto commented on the carbon footprint of Hawai'i's tourism industry, noting that in a rough calculation, just flying tourists in and out of Hawai'i is equivalent to half the carbon footprint Dr. Bernstein presented. Aalto commented that even if there is not as much policy control in aviation, there is still a responsibility to account for it. He noted legislative options such as imposing a carbon fee on every tourist when checking in at their hotel. Coffman noted issues with interstate commerce law.
- Fletcher asked about the status of the bill that went through the legislature calling for a carbon tax study. Jodi Malinoski responded that it was given an appropriation of \$150,000 given to the state Department of Business, Economic Development & Tourism (DBEDT). Once the bill is passed, DBEDT has to prioritize releasing the funds and then put out an RFP. It was noted that the bill does not specify what entity will do the study and when the report is due, but the budget is a two year budget.

Presentation on the City and County of Honolulu's first Greenhouse Gas Inventory by Energy Program Manager Rocky Mould, Resilience Office:

- Mould presented on the City's first ever GHG inventory, which is directly in line with CCSR's mandate to reduce climate emissions, green City operations, and ensure sustainable policies.
- CCSR is creating a climate action plan (CAP) as part of the Paris climate agreement the mayor committed to in 2017. A CAP consists of three parts: (1) a GHG inventory to take a snapshot of the current emissions level; (2) establishing reduction targets; and (3) identifying mitigation strategies through forecasting.
- CCSR completed the GHG inventory and is about to go into target setting, but is already moving forward on mitigation strategies such as a benchmarking plan, an update to energy codes, and energy performance contracts.
- The inventory was a collaboration with a variety of partners and relied on the state's 2009 GHG inventory in 2009 and its update in January 2019. CCSR also collaborated with the other counties as they worked on implementing the same processes and protocol for developing their respective inventories. All four counties became members of ICLEI, a global consortium of municipalities for sustainability, through which CCSR received expertise and consulting for employing GHG inventory protocols. CCSR also partnered with AECOM to develop a climate action planning game which was played at public meetings throughout the island.
- Mould noted that the inventory is community scale, which differs from the state's protocol. CCSR followed a city standard protocol developed by ICLEI, World Resources Institute and C40 Cities.
- A GHG inventory can have three scopes: (1) emissions that occur within the jurisdiction; (2) emissions from energy produced outside of the jurisdiction but used within; and (3) indirect emissions from activities that occur outside of the jurisdiction. Mould noted that for O'ahu, the inventory is a combination of scope 1 and 2, with a partial scope 3 to account of some out of boundary air transportation.
- Credible, and publicly available data sources were used so that the inventory can be updated on an ongoing basis. National and state level data was scaled down by de facto population to include both residents and tourists. Emissions factors were applied to activity data and fuel type to determine how much carbon is produced per unit of energy generation or per unit of activity. Calculations were made using Clear Path and CURB inventory tools. It was important to identify a complete set of data that covers the entire jurisdiction and is mutually exclusive but does not double count emissions.
- Mould presented the results of the 2016 GHG inventory. Similar to the state, the bulk of emissions came from transportation (on-road and domestic aviation).
- Mould also presented the results of the 2005 GHG inventory, which is being used as the baseline set by the Paris Agreement goal to achieve a 26-28 percent reduction in emissions under 2005 levels by 2025. Compared to the 2016 inventory, emissions have come down 17 percent overall, but emissions from ground transportation have not come down at all. Mould noted that significant progress is being made in the electricity system, but a lot of difference can still be made in building and transportation emissions.

- Mould noted a difference where in the state's inventory, grid electricity goes into energy industries, whereas for the City inventory, grid electricity is attributed per use in each sector.
- Mould noted that O'ahu's electricity system has the second highest carbon intensity per megawatt hour in the country.
- Mould presented the climate action planning game that was used at public meetings. The game presented the inventory to the community and asked them to identify preferred mitigation strategies.

Questions and comments that followed:

- Alegado asked if there are other cities that have an equivalent high tourist volume that can be used to tweak the model for more accurate air transportation emissions. Mould responded possibly Miami, New York, or Singapore would be similar and he would look into it.
- Fletcher asked if military emissions were considered in the inventory. Mould responded that fuel bought and used on base is not counted, only fuel used by military members off base.
- Henry Curtis commented that the City's inventory showed a 17 percent drop in emissions over 11 years compared to the state's inventory which showed a 3.3 percent drop in emissions over 30 years. Mould responded that the state's inventory used 1990 emissions as a baseline when the carbon intensity of the economy was significantly lower. He also noted that state's inventory showed emissions for only affected facilities per Act 234, which are those that DOH shows as large emitting facilities.
- Jodi Malinoski asked if the City or commission had commented on the AES coal plant's proposal to DOH in compliance with Act 234. Mould responded that the City has not weighed in, but has signed a coal free by 2025 declaration.
- Mehnert asked if improvements in emissions reductions in the building sector come purely on the operational side or from construction as well. Mould responded that construction emissions are present in the inventory, but construction has not been looked at from a policy standpoint.
- Bob Franco noted that Kapi'olani Community College (KCC) is getting a VISTA this year to do a GHG inventory and he is interested in learning how the process can be customized for a campus.
- Fletcher asked what CCSR is going to do with the inventory and if there will a public report for a strategy moving forward. Mould responded that CCSR is going into phases two and three of the climate action planning process which are target setting and identifying strategies. The climate action plan will be the strategy moving forward with policies and strategies the City will use to achieve emissions targets.
- Fletcher asked if there is an equivalent climate action planning effort at the state. Mould responded that the state has an inventory and forecasting, but there is not a complete CAP.
- Fletcher asked if there is a way the commission can help at the current stage. Mould suggested the commission review the inventory for any possible issues and help validate the data behind the strategies in the climate action plan.

Presentation on Bill 25 (2019), Relating to the Adoption of the State Energy Conservation Code by Energy Program Manager Rocky Mould, Resilience Office:

a. Discussion/Action by the Climate Change Commission on Bill 25 (2019)

- Mould noted that updating O'ahu's energy and electrical codes is the most foundational and impactful thing that can be done to achieve Hawai'i's climate goals.
- Hawai'i is in the second percentile when it comes to advancement on codes, and O'ahu's last update to the energy code was in 2006. Since a large amount of carbon emissions reductions embedded in codes happened between 2006 and 2015, adopting the International Energy Code Council (IECC) 2015 code will make buildings 33 percent more efficient moving forward.
- Mould presented the local amendments to the energy code:
 - Inclusion of a tropical zone code, which is an alternate pathway builders can select that allows for less air conditioning, ceiling fans, and longer eaves, which can lower costs in Hawai'i's climate.
 - A solar water heating provision pulls down the state mandate for solar water heating for

new residential construction and removes an exemption for gas, unless it is renewable. Exemptions would be offered for heat pumps and grid interactive water heaters in cases where a renewable sourced hot water system doesn't pay out over 15 years. Mould noted that solar hot water is the most affordable and clean, carbon free solution, and the amendment is an effort to lower costs for residents. CCSR engaged a broad spectrum of stakeholders and shared calculations and assumptions for both the economics and carbon impacts of various heating solutions and made adjustments based on their input. It was found that solar hot water has a payback of three to six years.

- An EV readiness amendment calls for 25 percent of all new multifamily stalls be level one ready and 25 percent of all new commercial stalls be level two ready. Mould noted that EV readiness will cause some extra installation cost but presents significant savings compared to a retrofit scenario. Mould noted that estimates show EVs will be at parity with internal combustion cars by about 2030 and the EV readiness amendment is to ensure that new construction won't have to retrofit at six to ten times the cost of new build.
- Mould noted that the update to the electrical code clears up language around batteries and PV plus storage systems to help installers approve such systems.
- Mould presented draft testimony in support of Bill 25 (2019) for the commission's review, which was also provided to the commission beforehand. Commissioners noted their support for the language in the testimony.

Fletcher moved and Alegado seconded the motion to approve the language of the commission's testimony for Bill 25 (19) (**AYE:** Alegado, Coffman, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None).

Questions and comments that followed:

- Jeff Burgett asked how Mould arrived at the 25 percent EV readiness and not 50 or 100 percent. Mould responded that the numbers were formed based on stakeholder outreach, where some wanted more EV ready stalls and some wanted none at all, so the 25 percent was a compromise.
- Souki noted that extrapolating federal data makes a disparate assumption to begin with for Hawai'i's emissions and water heating costs. She noted that currently where solar water heating variances are granted for gas, about 70 percent are not in optimal locations since not all homes are oriented to the best exposure for solar penetration. She also mentioned the PUC has guidelines on how solar water heaters should be installed, but they are not followed equally, and the heaters are often oversized, producing more water than needed and degrading parts inside the heater much faster, adding to operation costs.

Presentation on "Carbon Taxes: From Theory to Reality" by Henry Curtis, Life of the Land:

- Life of the Land has had a large impact on the environmental movement in Hawai'i, including winning the 1971 HECO writ case before the Supreme Court, as well as the 2006 HECO evidentiary hearing that led the HECO board to adopt a resolution that climate change is real and caused principally by fossil fuel. Recently, Life of the Land has been involved in 50 regulatory proceedings before the Public Utilities Commission (PUC).
- Curtis noted that when asked about the 100 percent renewable energy by 2045 goal, HECO provided an example where if the grid consists of 35 percent renewable, 65 percent fossil fuel, with an equivalent 80 units of rooftop solar, the RPS would be 115 percent. He stated that renewable energy is merely a political definition.
- Curtis presented that there have been three industry waves in reaction to climate change: (1) Exxon started hardening their system at the same time they began smearing scientists; (2) cap and trade became the hallmark of the Kyoto Protocol; and (3) the carbon tax.
- Curtis noted that a recent IPCC report indicated there must be a 50 percent cut in emissions in one decade and a good starting point is a carbon tax priced at \$115 per ton using 2010 dollars (\$155 today). No county has a price that high, but the closest is Sweden, Lichtenstein, and Switzerland. The average rate among OECD nations is \$8 per ton.

- Curtis noted that the American Council for an Energy-Efficient Economy (ACEEE) analyzed 16 nations plus Boulder, British Columbia, and Quebec and found that the average reductions in emissions attributed to a carbon tax is 1.3 percent. Curtis noted that a carbon tax is necessary but not sufficient and lowering emissions requires a number of different programs.
- Curtis noted that a carbon tax is transparent in regards to the amount of money the government raised but not in regards to how much each individual pays. He stated it would be nice to have GHG emissions per gallon available next to the price at the fuel pump so that consumers can make responsible decisions, instead of assuming corporations will make the right choices while grandfathering their actions.

Questions and comments that followed:

- Fletcher asked if Hawai'i will be fossil free by 2045. Curtis responded no, that Hawai'i will have an RPS of 100 percent by 2045, which is different because it is defined by renewable energy not tied to GHGs. Coffman commented that there are many tools, but all can be manipulated because they get politically interpreted, and many policies can be good and bad depending on how they're implemented.
- Coffman asked if there are examples of places that have labeled for carbon. Curtis responded that west coast cities have begun looking into it, but it has not been fully implemented. Curtis noted that as an island, O'ahu has far greater embedded emissions than most other places. He noted examples of how using cement and fracking for electricity can offset emissions reductions. He also noted there is a large amount of unaccounted for emissions from gas wells.
- Tom Brandt commented that Governor Inslee tried to do a carbon tax in Washington State and Governor Brown in California but neither worked. He noted the billions in fossil fuel subsidies need to be reduced in order to level the playing field between renewables and fossil fuels.
- Jeannine Souki made the following comments in response to Curtis' presentation:
 - Natural gas (syngas) has historically been made out of oil products, but overtime has transitioned from heavy oil to naphtha on the lighter end of the refinery.
 - Most of the gas used for utility consumption is produced locally and does not come from fracked resources.
 - Hawai'i Gas has begun renewable natural gas (RNG) production in partnership with the City and County in 2019 from waste methane and it is carbon negative.
 - Natural gas as an energy resource has the lowest carbon intensity of fossil fuels if managed correctly.
 - Hawai'i Gas reports all emissions that come from synthetic natural gas (SNG) production and according to the latest reports to the Energy Information Administration, its SNG plant is attributed to one third of one percent of GHG emissions in the energy sector for the state.
 - Hawai'i Gas disagrees with the City's proposal to ban gas water heating because an electric resistance water heater adds five times the emissions of an instant gas water heater.
- Alegado asked if the presented increase in solid wastewater emissions ties into reuse of energy for natural gas. Mould responded that the emissions metric was estimated based on population growth, but the Honouliuli plant will provide more insight.
- Bernstein commented that the carbon tax was mischaracterized in Curtis' presentation and noted that there is no grandfathering in a carbon tax. Curtis responded that he is not aware of a carbon tax that is applied to everyone and there have always been certain industries exempt from the tax.

Public Input for Matters Not on the Agenda:

- David Arakawa commented that the commission did not allow public testimony for items on the agenda, and specifically in regards to agenda items 8 and 8a on Bill 25 (2019).
- Sue-Ako noted that the meeting agenda did not specify taking action on adopting testimony for Bill 25 (2019). Since the commission voted on the testimony, it would need to change the agenda by 2/3 vote or table the action and then take it again with a properly listed agenda item at a later time.

Chair Coffman opened up testimony on previous agenda items 8 and 8a to allow for public testimony:

- Arakawa presented testimony on behalf of the State Land Use Research Foundation in opposition to Bill 25 (2019):
 - In regards to the EV charging requirement:
 - The 25 percent of stalls number is an arbitrary that stakeholders did not agree to.
 - It is illogical because it mandates old technology.
 - It adds costs of up to \$11,300 for each parking stall, which will negatively impact housing prices in communities.
 - Hawai'i should follow California and New York's example of providing millions of dollars for public charging stations and inductive charging roads instead of creating mandates.
 - The proposed implementation date is unreasonable and would require changes to permits that are already ongoing.
 - LURF proposes the commission and CCSR look into rebates and other incentives for EV ready parking stalls at state and county facilities.
 - LURF proposes creating a working group to prepare a reliable study relating to EV charging stations.
 - The restriction on air conditioning to not more than half the area of the dwelling unit raises a huge health and safety issue.
 - Imposing the restriction on gas water heaters for 90 percent renewable water heating at this time is akin to a prohibition. Not even the solar installations achieve 90 percent efficiency.
 - By HRS definition of renewable energy, there are nine sources of renewable energy, four of which would be banned with a 90 percent requirement (biogas, biomass, biofuels, and hydrogen).
 - The cost of a gas water heater is \$2,900. An 80 gallon solar water heater costs \$7,800 and \$8,800 for 120 gallons. The warranty on gas heaters is 20-25 years and 13-15 for solar water heaters. Gas water heaters are more efficient than solar water heaters and a suite of gas appliances saves more energy. Gas water heaters are resilient during storms.
- Arakawa commented that there are certain industries and interests not represented on the commission and the City's resilience strategy steering committee.
- Arakawa announced that LURF is collaborating on similar issues with DBEDT.
- Alegado commented on the discrepancy in cost for an EV ready stall between Mould's presentation and Arakawa's testimony. Mould's data was for retrofit scenarios and Arakawa's for new build, but Mould noted he would like to see where LURF's data comes from to understand the discrepancy.
- Gruenstein responded to testimony that CCSR has shared all assumptions, data, and information but has not received similar data in order to verify numbers from Hawai'i Gas, although it was promised. In regard to testimony on EV readiness, Gruenstein responded that the 25 percent was a compromise and it was never said that every stakeholder agreed to it.

Coffman motioned and Alegado seconded the motion to retract the vote on adopting testimony for Bill 25 (2019) to be re-voted on at a later date (**AYE:** Alegado, Coffman, Fletcher, Keener, Mehnert; **NAY:** None; **ABSTAIN:** None).

Tentative Next Meeting: The next Climate Change Commission meeting will be scheduled at a later date.

Announcements:

- None.

Adjournment: The meeting was adjourned at 5:55 P.M.