

Menti Questions

Disclaimer: These questions were collected from conference attendees via Menti at Hā O Ke Kai, the State's First Annual Climate Conference held on January 14, 2019. The questions are edited for spelling and other minor errors, but are largely presented as received, sorted by panel. They are meant to further the discussion on these difficult issues, not necessarily for the State to respond to, and some of these may be posted on the State's Facebook account @hiclimate to enable public discussion.

PANEL 1

Coming Clean: Addressing Hawaii's Emissions from Transportation

Switching from Fossil Fuels

- How do we incentivize the transition from fossil fuels to renewables, particularly for the companies/shareholders who invested in those systems that essentially became public infrastructure?
- Have the concept of renewable energy microgrids, and incentives companies need to make them with the investments, been considered as options to increase renewal energy that benefits local community?
- The transition from FF to renewable sources will be incremental. Other than cars/buses, what are the biggest emitters that we should focus on?
- "Can we get state local gov and unions and others to divest from fossil fuels - move the money out of dirty portfolios?"

Bus Technology

- Why can't you electrify more buses by 2020?
- Why doesn't The Bus have surfboard racks like the buses in the ski areas do?
- The city committed to a carbon free ground transportation fleet by 2035. This requires swapping out 33 diesel to electric buses per year to achieve that goal. Do you have a plan to meet the goal?

Age Neutral

- What are first and last mile solutions that are attractive to all ages?
- In a renewable energy portfolio, multiple generation sources should be considered. With limited space, wind/solar is at a disadvantage in Hawai'i. Are there considerations for developing geothermal?

Connectedness

- Our affordable housing crisis is pushing people further away from job centers— driving up vehicle miles traveled (VMT). Any thoughts on intersection between housing, equity, transportation, climate change? Policy prescriptions?
- How will the bus connect with the rail to help people reach their destinations off the rail route? Will it make it to the University?
- How well do Biki stations align with transit stops?

Ridership

- How do we incentivize commuters to use The Bus/Biki etc. for a least 1 day at a time, when it's convenient for them? Free parking on days they do drive, free bus ride, biki, etc.?
- Any thoughts on solutions for Hawai'i Island, which has a highly dysfunctional public transit system and huge distances between population centers (making EV ranges challenging)?
- Why do you think bus use is declining?
- How many people have signed up for the holo card?
- How much does bus ridership need to rise in order to expand network coverage/frequency?
- I often see tourists taking things like the Waikiki trolley or the 'Oli'Oli bus, but no locals. Are these services hurting the effectiveness of public transportation on O'ahu?
- In Salt Lake, a neighborhood shuttle bus delivering passengers to a nonstop bus stop to downtown would work better than the current route 3 choice.

Alternative Modes

- How can we incentivize the poor out of their clunkers and into more efficient cars?
- Are there any plans to incentivize using mopeds (electric or conventional) who have ~80-100 mpg?
- How much does an increase in biking (riders, safety, etc) matter to emissions reduction?
- Do you perceive rideshare as being more sustainable than individual driving?
- If communities organize and advocate for safe transportation alternatives in their neighborhood, how can they be implemented?

Visitors/Tourism

- How many electric vehicles are there in Hawaii's car rental companies fleets in 2018?
- How are you integrating tourism into transportation? Both from visitor use and workers getting to work? Are rental cars and hotels/resorts/the Hawai'i Tourism Authority engaged in planning?
- Will there be options for inter-island travel that has a low carbon footprint?

EV's

- Is the pace of electrification of transport adequate to meet the state goal?
- With the current technology for electric vehicles which require large batteries, the overall impact on the environment caused by battery production and disposal is still detrimental. Should we wait?

Charging Stations

- There appears to be a stagnation in the setting up new charging stations. Why is that and when will there be a significant increase in stations?
- When will we have solar farms available for renters and condo owners so that they could think about buying an EV and charging at home and also have lower electric bills?

Miscellaneous:

- Does Honolulu participate in the multi-city program called City Innovate?
- What are your thoughts on an innovation funding for startups by the state similar to the Massachusetts clean energy center?

PANEL 2

Padding Together to Acceleration Action for Adaptation to Sea Level Rise

Land Owners and Housing/Development

- How do we incentivize owners of land by the beach to surrender their property?
- How do we make managed retreat equitable for those who will be impacted the most (homeowners and businesses along the shoreline)?
- If the government refuses to allow a home owner near the coast to defend or rebuild a house threatened by sea level rise, would it be considered a taking?
- Has Hawai'i considered using the New Jersey model for purchasing properties in at risk areas (funding through property taxes)?
- In Florida or Massachusetts, have any policies been put into place to help those - especially lower-middle income communities - relocate / have access to housing?
- Jennifer, you mentioned that sea level rise has been adopted as a zoning parameter. How has your county mitigated entitlements? Have you faced legal issues and how have you fared?
- Who should have to pay to relocate structures to protect beaches? The structure owners or the public?
- What are we doing to educate urban and low-income communities, as well as the homeless, on this anticipated sea level rise? Are they not the most affected by this?
- Can we adopt a "no rescue policy" for beachfront owners, including no subsidized insurance (by state or feds), so that beachfront owners just bear the cost and will plan better for real risk?
- Doug Codiga mentioned mitigation needs to be replaced by proactive measures at this point. Dr. Jurado shared that ANY NEW DEVELOPMENT needs to be in line with strict laws which take into account the sea level rise.
- What kind of policy needs to be developed to control building residential and commercial building near the shoreline?
- Will island centric housing solutions require less mainland style designs?

Using State Entities/Disasters

- So aren't these issues dealing with land use planning and management? Why isn't the State's Office of Planning involved in these discussions and panel?
- Any recommendations on measures we need to take regarding tourism impacts in relation to Hawaii's climate change (i.e. erosion -infrastructure, shoreline -roadway -maintenance, beach - access)?
- One of the biggest public health concerns is sewage from septic - how have these policies worked in Florida and Massachusetts?
- How do we tie disaster recovery to climate adaptation?
- How might the public trust doctrine apply to beach preservation within the climate change context?

Studies/Maps

- Sea level rise is a dynamic process but most studies in Hawai'i treat the rise by simply raising the water level. Why are there no studies on the dynamic processes associated with sea level rise?

- I was glad to hear Dr. Fletcher discuss how rising ocean temperatures will affect convection currents. Please elaborate on effects of losing the ice caps on ocean currents, winds, storms, etc.
- Do the models predicting sea level rise, take into account the melting of Greenland and changes in Antarctica?
- Is there a map online that shows predicted sea level rise (according to the most recent models) on coasts around the world?
- How do we deal with high tide referenced TMKs?

Natural Prevention

- Should we preserve wetlands within the current flood plains?
- Is there a living shoreline case study in Hawai‘i?
- In Florida and Massachusetts how has urban tree planting been facilitated as a solution to heat, islands, or storm water?
- Massachusetts emphasizes the use of nature, what exactly does a natural approach look like? Why does this program emphasize green as opposed to other types of approaches?
- What is the priority of coral reef conservation in protecting coastal erosion and storm surge damage?
- To what degree is ancestral history and knowledge being considered in climate change adaptation and implementation (i.e., considering beaches as ‘āina/cultural resource vs. tourism driver)?
- Is all the land inshore of beaches composed of sand?
- How do we fund a robust nature based solution program - green tax or reallocation of the barrel tax?

Beach Protection/Saving

- What is the city/state doing to ensure that beaches are equally protected across Hawai‘i? Not just Waikīkī/Ala Moana?
- Who will decide which coastal areas will be “hardened” vs “softened”? Will Wai‘anae be sacrificed for Kaka‘ako? How will those decisions be made?
- How have our guests (Jennifer and Steve) balanced the dual goals of protecting beaches and hard infrastructure in planning in Florida and Massachusetts?

Retreat

- Can we think of a word better than “retreat”? We need a positive word to inspire people to widen our shorelines for the public trust and use of everyone, shifting away from privatization of the shoreline
- Are there any financing mechanisms for funding adaptation or retreat implementation?
- In a state with a tourism based economy, why are we promoting managed retreat (basically abandoning existing development along the shorelines)?
- What does managed retreat look like for the counties? Should counties be proactively decreasing density within the sea level rise exposure area (SLR-XA)? Or should we wait for the State to lead?
- Who should make the decision to fortify or raise or retreat from Waikīkī?
- What does managed retreat look like for the counties? Should counties be proactively decreasing density within the SLR-XA? Or should we wait for the State to lead?
- What would managed retreat look like and who would design the plan?

- What existing Hawai'i policies can help us in managed retreat and shoreline adaptation? (For Mr. Codiga and Mr. Aila mainly)
- When and how do the agencies and researchers plan to engage stakeholders who will be affected most by sea level rise, managed retreat, etc.

Funding

- Why is the City planning to spend \$144 million on changing Ala Moana Beach when that money is needed elsewhere and that beach's king tides are predicted to reach the shopping center in the next 10 years
- Why did Broward County plan for 2 feet of sea level rise when 3 feet seems to be what most planning agencies are looking at as a standard model of sea level rise?
- How did Miami get people to pay for raising roads?
- Steve, how would the coastal buyback work?
- Steve, you spent billions on the BigDig - was it designed around a sea level standard?
- Dr. Jurado said in her closing remark that the public should also help pay as government pays to help provide solutions. That would make sense with a government that is not spending the taxpayers money wisely.

Building/Adaptation

- Has the panel come across how to solve sea level rise by building islands?
- For Massachusetts and Florida, how do you balance sand dune preservation and seawall protection regulations? Is it specific to regions on the coast with different wave action or a blanket policy?
- Aren't seawalls an effective form of sea level rise adaptation, and wouldn't they make sense in areas without sandy beaches?
- How do you determine if a seawall is to be allowed?
- Erosion and sea level rise are incremental processes. Why are we focusing on managed retreat? Shouldn't we be restoring/expanding beaches or building new beaches (e.g. Waikiki)?

Education

- As a teacher of high school students, we are looking to get students active and involved in protecting Hawai'i and our environment. What do you believe is the highest priority issue for schools to get involved
- In terms of education, what initiatives are being created to educate the country? Have there been education programs to teach students from elementary to graduate school?

PANEL 3

All Hands on Deck: Innovating to Implement Adaptation to Sea Level Rise

Revenue/Revenue Neutral

- Dr. Bauman, what are your thoughts on British Columbia's revenue neutral carbon tax and its impact towards low to moderate income communities?
- Yoram - carbon-free why give back new sources of revenue when we have roads falling into the ocean?
- Richard - moving coastal roads will cost a lot of money. If you don't support a carbon tax, where will the revenue come from?
- Instead of first asking the public how much we are willing to pay, we would like to see the monies already being given regularly being used where most needed, not being wasted on things not needed.
- Hawaii's Act 16 (2018), establishes a State Carbon Offset Program. It will collect revenues from voluntary carbon credits and deposit into climate adaptation funds. Is this enough, instead of a Carbon Tax?

Hawaii Specific Mechanisms

- What is the most successful carbon pricing policy that Hawai'i could use as a model? Success in terms of meaningful greenhouse gas emission reductions?
- Wouldn't a carbon FEE - DIVIDEND be an excellent incentive tool? It's equitable as opposed to a tax.
- What about a combination of carbon tax and offset market for example by exempting companies from the tax that offset their emissions?

Convert Transportation

- Carbon taxes have failed in several states. Where will funding come from to convert our transportation sector?

Fossil Fuel Industry

- How can the carbon tax conversation reach the very powerful fossil fuels industry?

Liquid Natural Gas (LNG)

- I saw that there were zero natural gas emissions on Yoram's graph of Hawai'i emissions. Shouldn't you count the cost of fracking; transporting and infrastructure costs of LNG as well as possible leaks? How do we avoid the French yellow jacket example?

Climate Deniers

- Have any panelists found that promotion of "carbon pricing" further inflame climate change deniers' assertions that this is all a hoax for governments to justify additional taxes and extract money?

Personal Change

- How do we inspire personal change in habits to reduce personal carbon emissions? What will make the most effective change? Is it carbon pricing? Moral standing? Laws?