

City and County of Honolulu Climate Change Commission
Department of Planning and Permitting – Primary Urban Center Development Plan Comments

COMMISSIONER: Melanie Islam
 DATE: 1/12/2023

Chapter	Page Number	Goal/Policy/Action/Other	Comment
Chapter 4: Housing	178 - 181	Goal H-2: Expand the Availability of Quality Affordable Housing for PUC Residents	All new buildings should be green buildings. This is critically important for affordable and workforce housing developments as individuals and families in these income brackets are greatly impacted and often burdened by energy costs, use of low-quality unhealthy building materials, and poor air quality. A section on the need for green affordable housing is necessary. Successful examples of this exist in Honolulu PUC and include: Keauhou Lane (LEED Platinum), Nohona Hale (LEED Platinum), Ola Ka 'Ilima Art Lofts (LEED Gold), Banyan Street Manor, Hale Kalele, Hausten Gardens, Halewai'olu (upcoming, LEED Gold).
Chapter 7: Healthy Communities	242	Goal HC-1: Foster a healthy built environment in the PUC/ Policy HC-1.1: Encourage exemplary healthy (“green”) building standards.	Recommend adding "occupant well-being" after community health. Impacts should benefit occupant well-being in addition to the community.
Chapter 7: Healthy Communities	242	Goal HC-1: Foster a healthy built environment in the PUC/ Policy HC-1.1: Encourage exemplary healthy (“green”) building standards.	Consider revising "indoor air quality" to indoor environmental quality". It is an all-encompassing term that includes air quality, health and carbon impact of materials, access to daylight and air (both natural and active), thermal comfort, and views to outdoors.
Chapter 7: Healthy Communities	242	Goal HC-1: Foster a healthy built environment in the PUC/ Policy HC-1.1: Encourage exemplary healthy (“green”) building standards.	Healthy Building Checklist. Recommend the City develop a integrated checklist through collaboration with other departments to simplify City's goals to development and architecture community. A coordinated checklist also ensure enforcement during the building permit review process.

Chapter 7: Healthy Communities	242	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.1: Encourage exemplary healthy ("green") building standards; <i>Other Actions: Bullet 4</i>	Recommend revising to the following as it encompasses recognized third-party certification programs. "Work with new building and renovation projects that wish to achieve high environmental performance through certification through recognized third-party green building certification programs such as LEED, WELL Building Standard, Living Building Challenge and Passive House."
Chapter 7: Healthy Communities	242	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.1: Encourage exemplary healthy ("green") building standards; <i>Other Actions: Bullet 4</i>	Recommend adding "and reducing carbon emissions" at the end of the sentence. Building reuse preserves embodied carbon of a building which overall reduces the carbon footprint of a building. Smart building renovation will be next frontier to reduce carbon emissions as more clean energy sources come online and as efficiency standards meet their peak.
Chapter 7: Healthy Communities	243	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.2: Promote strategies to increase energy efficiency in buildings.	Consider revising title to "Promote strategies to increase energy efficiency and clean energy in buildings". Revised title represents the listed actions - efficiency and clean energy sources.
Chapter 7: Healthy Communities	243	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.2: Promote strategies to increase energy efficiency in buildings; <i>Priority Action</i>	Better Building Benchmarking program is already implemented. If the Plan has a 2030/50 horizon, recommend changing the action to "Implement a Building Performance Standard program". Building Performance Standards are an outcome based performance standard to reduce GHG emissions by being the next step after establishing benchmarking standards. Standards for energy, water, and fuel use are established based upon building typology and use. Additionally, carbon emission targets are established. BPS impact existing buildings and allow for standards to evolve overtime as building codes, GHG targets, and fuel avoidance standards change. The revised action could read "Implement a Building Performance Standard program. The proposed program will establish energy, water, and fuel source performance targets for large projects over X SF based upon building use, to reduce greenhouse gas emissions and boost climate resiliency."
Chapter 7: Healthy Communities	243	Goal HC-1:Foster a healthy built environment in the PUC/ Policy HC-1.2: Promote strategies to	Recommend changing the third action to "EV and PV Ready" Construction. Incorporating PV readiness into new builds/major renovations is ALWAYS more cost effective than a retrofit project. Add "Establish requirements for PV Ready for new construction commercial

		increase energy efficiency in buildings; <i>Priority Action</i>	projects." The code already requires PV ready for residential; we MUST add PV ready as a requirement to meet State and City clean energy targets.
Chapter 7: Healthy Communities	243	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.2: Promote strategies to increase energy efficiency in buildings; <i>Other Actions</i>	Recommend revising bullet 1 to read: "Monitor emergence of energy resilience technologies (such as battery energy storage, microgrid technology, and grid integration technology) and ensure codes... Clean energy transition will require buildings integration and relay with the aforementioned systems.
Chapter 7: Healthy Communities	244	Goal HC-1: Foster a healthy built environment in the PUC / Policy HC-1.3: Avoid/mitigate the Urban Heat Island Effect and reduce heat stress; <i>Other Actions</i>	Building code already includes requirements for residential tropical building code as part of the 2015 IECC code adoption. If amendments are required, recommended adding provisions to the upcoming 2018 IECC adoption cycle.
Chapter 7: Healthy Communities	252	Goal HC-3: Support initiatives that improve community engagement, health, and equity. / Policy HC-3-3: Increase community resilience and disaster preparedness; Figure 7.2	Excellent map! Encourage more readily accessible maps that easily overlay all necessary information for development and design community. See City of Boston Zoning Viewer as an example http://maps.bostonredevelopmentauthority.org/zoningviewer/
Chapter 9: Water Resources	311	Goal WR-3: Maintain Resilient Water Infrastructure Systems / Policy WR-3.2: Maintain Resilient Water Infrastructure Systems	It is critical to reduce demands to potable water systems. As impacts from drought strain our water system, recommend increasing timeline to on implementation of gray water reuse systems to short-term and expanding option to private development. Allowing alternate water systems into buildings will reduce demand on potable water use by allowing greywater systems to support toilet flushing, cooling plants, and site irrigation (already allowed). Support expedited code advancement to allow for grey water reuse to enter buildings. Grey water systems can be incorporated and integrated with stormwater strategies at both the building and district scale. Recommend reviewing City of San Francisco's Recycled Water Ordinance.

City and County of Honolulu Climate Change Commission
Department of Planning and Permitting – Primary Urban Center Development Plan Comments

COMMISSIONER: Kiana Otsuka
DATE: 1/12/2023

Chapter	Page Number	Goal/Policy/Action/Other	Comment
Chapter 6: Mobility + Connectivity	221	Goal MC-1: Provide Safe, Accessible, and Affordable Multimodal Transportation Options / Policy MC-1.2 Continually improve the efficiency and connectivity of public transit in PUC neighborhoods.	Increasing transit ridership is an integral part of reducing the demand for energy in the transportation sector, and therefore reducing ground transportation emissions. One of the most effective ways to increase ridership is to reduce travel time by increasing the frequency of transit service. This may be done by funding additional bus service and/or making bus travel faster by designing streets with dedicated bus lanes. Other factors that increase transit ridership are reduced fares, increased hours of service, improved safety, and increased geographic coverage. The Commission would like to suggest the language of Policy MC-1.2 be revised to reflect the need for our transit ridership and frequency of transit to increase. An example might be, “Increase transit ridership by increasing the frequency, efficiency, and connectivity of public transit in PUC neighborhoods”. Another suggestion DPP may consider for this policy is to add a priority action that the cost and feasibility of increasing the frequency of transit service be studied.
Chapter 6: Mobility + Connectivity	222	Goal MC-1: Provide Safe, Accessible, and Affordable Multimodal Transportation Options / Policy MC-1.3: Continue to expand facilities and comfort in the bicycle network.	The O’ahu Bike Plan’s public outreach identified safety concerns as the primary reason people do not ride their bikes more often. Their survey participants held similar views, with 92% of participants saying they would feel very comfortable riding in a protected bike lane. Providing facilities where people feel safe biking is a vital part of increasing bicycle ridership. The Climate Commission would like to suggest the language of Policy MC-1.3 be revised to reflect the need to prioritize building bicycle facilities where people feel safe. An example might be, “Continue to expand facilities and the bicycle network and prioritize those facilities that make people feel safe and comfortable”.

Chapter 6: Mobility + Connectivity	224	Goal MC-2: Create an Adaptable and Flexible Transportation System / Policy MC-2.1: Reduce dependency on single-occupancy vehicle miles traveled (VMT).	The Climate Commission is pleased to see that this policy is included in the PUC Development Plan Draft, as vehicle miles traveled (VMT) in Hawai'i has increased almost 40% over the last 25 years and is projected to continue to increase without intervention. While the State is exceeding its statutory renewable energy targets to reduce GHG emissions from electricity generation and the number of electric cars on the road is increasing, transportation sector emissions remain high and are projected to continue increasing. Electrification of ground transportation is a key component of reaching the State's 2045 goal yet poses challenges for clean energy generation. Hawaiian Electric's Power Supply Improvement Plan (PSIP) scenarios for O'ahu estimated between 6,000 to 13,000 acres of land would be required to generate enough renewable energy to electrify half of the cars on the road. To reduce the number of acres needed, it is essential to reduce the amount of energy needed for all sectors, including transportation.
--	-----	--	--

City and County of Honolulu Climate Change Commission
Department of Planning and Permitting – Primary Urban Center Development Plan Comments

COMMISSIONER: Victoria Keener
DATE: 1/13/2023

Chapter	Page Number	Goal/Policy/Action/Other	Comment
9 - Water	3		Drought is not specifically listed at this high level as a risk to mitigate and plan for, though it is called or implied in policies and goals throughout the chapter. As the state has experienced some of its worst droughts on record since 2008 and climate projections suggest that it will be a continuing risk, I suggest calling it out by name, perhaps in Policy 3.2: "Help mitigate drought and support water conservation projects and programs to manage demand." Heavy rainfall after a period of drought can also result in increased erosion and decreases in water quality, so could add it in goal WR 2 as well, and policy 1.3 "Address chronic storm flooding and ongoing drought issues through multiple solutions."
9 - Water	7	infrastructure to support growth and development	While urban growth/development in the rail corridor and other regions is called out as a factor increasing the need to improve, expand, and back-up water infrastructure, another major risk that is not specifically called out is the Red Hill spills and the impact of the US-Military. Although their water infrastructure is separate, as we have seen, the aquifers that feed both the civilian and military populations are not. Consider calling out military impact as a direct reason to upgrade water infrastructure in the PUC and to develop contingencies in case more wells adjacent to Red Hill need to be shut down.
9 - Water	throughout	One Water	Excellent job of weaving One Water model and framework throughout the chapter.
9 - Water	12		Consider calling out drought impacts by name. "Restoration projects. Support catalytic forest, stream, and shoreline restoration projects identified in the PUC WMP, including planning and permitting of flood retention basins and increasing resilience to the impacts of drought".
9 - Water	14		Consider directly supporting the need for climate-conscious sustainable yields for supply-side management under a great deal of future uncertainty.

9 - Water	14	2.1 - Other actions	"• Continue to support the de-fueling of underground fuel tanks in Red Hill. Increase gravity-fed secondary and tertiary water infrastructure in watershed areas affected by or adjacent to Red Hill."
9 - Water	15	2.2 - Other actions	Support establishment of instream flow standards for ecological system maintenance.
9 - Water	17	3.1- intro paragraph	"Maintaining resilient water infrastructure includes improving the efficacy and reliability of existing systems and preparing those systems for projected conditions such as climate change and sea level rise impacts, including rising groundwater and potentially less rainfall." Clarify "rising groundwater" - "...including the impacts of sea level rise raising the groundwater table and reducing aquifer storage, and potentially less overall rainfall with increasing storm intensity"
9 - Water	17	3.1 - Other actions	increase use of Honouliuli R1 supply to reduce pumping demand. Build more R1 treatment plants in strategic locations (specifically for Red Hill areas?)
9 - Water	19	3.3	"Improve coordination of capacity, hydrologic, and land use planning models."