OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY
CITY AND COUNTY OF HONOLULU

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March 31, 2023

The Honorable Matt Weyer, Chair
and Members
Committee on Housing, Sustainability and Health
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

Dear Chair Weyer and Councilmembers:

SUBJECT: Bill 4 (2023), Relating to the Adoption of the Hawai'i State Energy Code

The Office of Climate Change, Sustainability and Resiliency (CCSR) strongly supports Bill 4 (2023), which adopts the Hawai'i State Energy Code (2018 International Energy Conservation Code [IECC] with state amendments) with local amendments as the City and County of Honolulu's ("City") Building Energy Conservation Code ("Energy Code"). CCSR additionally supports Committee Chair Weyer's Proposed CD1 to Bill 4 (MW3).

Buildings play a large role in our ability to address long-term affordability for residents and the impacts of climate change. Since a building's operational performance is largely determined by upfront decisions, energy codes present a unique opportunity to assure utility savings for occupants long-term through minimum efficiency requirements for design and construction. In addition to dollar savings, regularly updated energy codes are one of the most important tools we have to achieve our climate change goals by unlocking greater energy efficiency to drive down carbon pollution.

In December of 2020, the Hawai'i State Building Code Council unanimously approved the 2018 IECC as the Hawai'i State Energy Code. Per state law, the City is now required to update its own Energy Code to the state code with any local amendments applicable to O'ahu's unique development context. Although widely accepted as a modest update from the previous code, the U.S. Department of Energy reviewed the 2018 IECC and determined the updated edition would improve energy efficiency in new buildings subject to the code compared to the previous 2015 edition (the City's current code)[1].

Bill 4 includes sensible local amendments that simplify or eliminate code requirements where possible, update efficiency requirements to meet modern standards, protect against climate change

1 *Determination Regarding Energy Efficiency Improvements in the 2018 International Energy Conservation Code (IECC).* Department of Energy, Energy Efficiency and Renew able Energy Office: https://w w w .regulations.gov/docket/EERE-2018-BT-DET-0014.

hazards like increasing temperatures, and incentivize market leadership in efficient design and construction. In particular, Bill 4 includes:

1. An optional Stretch Code for leaders in the market seeking guidance on the design of buildings that can interact with the electricity grid to maximize efficiency and cost savings throughout the day.

2. Increased lighting efficiency to keep pace with LED lighting options already available on the market today.

3. Increased solar reflectance to avoid heat gain in buildings as temperatures rise due to climate change and to keep building occupants safe.

4. Removing requirements for floor insulation and hot water recirculation pumps to avoid unnecessary costs without compromising efficiency.

5. Higher efficiency requirements for large single-family homes over 4,000 square feet to enable workforce development and market adoption of improved technologies in a small segment of the housing market.

Following the discussion at the Committee's March 1st meeting, CCSR continued direct engagement with industry stakeholders to address additional comments and suggestions for the code since its introduction. We believe the amendments in Committee Chair Weyer's Proposed CD1 effectively address outstanding concerns and strengthen the clarity and intent of certain provision of the bill. In particular, the Proposed CD1:

1. Clarifies the voluntary nature of the commercial stretch code to encourage, but not require, its use.

2. With regard to the exemption from continuous insulation for mass walls, amends the first exemption to require a reflective wall covering using a light reflectance value (rather than a solar reflectance index), a measurement more widely understood and available to designers and builders today.

3. With regard to efficiency requirements for large single-family homes, specifies which appliances shall be smart appliances capable of responding to grid signals, acknowledging that not all appliances have such capable models available on the market today.

4. Lowers the solar reflectance requirement for steep-sloped residential roofs to provide more flexibility on roofing material choices for owners, designers, and contractors while still providing enough reflectivity to minimize heat and enhance building occupant comfort.

With these amendments, Bill 4 balances upfront costs with increased efficiency to assure that new buildings remain affordable and comfortable to live and work in. Keeping our Energy Code

up-to-date and localized to meet our needs will ensure these early investments in efficiency continue to pay dividends to owners and occupants for years into the future. We look forward to continued engagement with the Council and industry stakeholders towards adoption of this important affordability and health and safety measure.

Thank you for the opportunity to provide these comments in support of Committee Chair Weyer's Proposed CD1 to Bill 4 (2023). Should you have any questions, please feel free to contact me at (808) 768-2277 or via e-mail at resilientoahu@honolulu.gov.

Sincerely,

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APPROVED:

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