BILL004(23) Testimony

MISC. COMM. 71

COUNCIL

COUNCIL Meeting

Meeting Date: Feb 22, 2023 @ 10:00 AM

Support: 3
Oppose: 2
I wish to comment: 1

Name:	Email:	Zip:
Ted Bohlen	tbohl8@yahoo.com	96822
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Representing:	Position:	Submitted:
Climate Protectors Hawaii	Support	Feb 20, 2023 @ 08:39 AM
Testimony: The Climate Protectors Hawaii str and greenhouse gas emissions.	ongly supports Bill 004(23) to improve future buil	ldings' energy efficiency to reduce energy use
Name:	Email:	Zip:
Evan Oue	eoue@imanaka-asato.com	96813
Representing:	Position:	Submitted:
NAIOP Hawaii Chapter	Oppose	Feb 21, 2023 @ 08:46 AM
Name:	Email:	Zip:
Evan Oue	eoue@imanaka-asato.com	96813
Representing:	Position:	Submitted:
NAIOP Hawaii Chapter	Oppose	Feb 21, 2023 @ 10:54 AM
Name:	Email:	Zip:
Mark Glick	howard.c.wiig@hawaii.gov	96813
Representing:	Position:	Submitted:
Hawaii State Energy Office	Support	Feb 21, 2023 @ 01:24 PM
Name:	Email:	Zip:
Howard Wiig	howard.c.wiig@hawaii.gov	96813
Representing:	Position:	Submitted:
Hawaii State Energy Office	Support	Feb 21, 2023 @ 05:04 PM
Name:	Email:	Zip:
Stefanie Sakamoto	ssakamoto@imanaka-asato.com	96789
Representing:	Position:	Submitted:
BIA Hawaii	I wish to comment	Feb 21, 2023 @ 06:34 PM



February 21, 2023

Councilmember Tommy Waters, Chair Councilmember Esther Kia'aina, Vice Chair Members of the Honolulu City Council

RE: Bill 4 – RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE.

Hearing date - February 22, 2023 at 10:00 a.m.

Aloha Chair Waters, Chair Kia'aina and members of the council,

Thank you for allowing NAIOP Hawaii to submit testimony in **OPPOSITION TO BILL 4 – RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE.** NAIOP Hawaii is the Hawaii chapter of the nation's leading organization for office, industrial, retail, residential and mixed-use real estate. NAIOP Hawaii has over 200 members in the State including local developers, owners, investors, asset managers, lenders and other professionals.

Hawaii is facing a severe housing affordability crisis. The building of affordable housing in Hawaii has become increasingly more difficult. Currently, interest rates for 30 years fixed residential mortgages have significantly risen from 3.07% to 6.90% within the past 2 years representing a near 150% increase. This has led to a dramatic increase in monthly costs of owning a home in Hawaii. Moreover, construction loan interest rates have increased from .05% to 3.81% representing a nearly seventy-five-fold increase which dramatically increase the costs of building residential units.

In addition, during this high-cost period, building codes have created additional challenges for home building. The simple reality is that the building codes have changed from minimum standards for the health and safety of building occupants to a regressive tax on housing.

Accordingly, NAIOP Hawaii opposes proposed amendments to the 2021 IECC which will add unnecessary costs to housing. Specifically, cost benefit analysis shows that there is no good reason to exceed the current code requirements especially during a severe housing affordability crisis.

An analysis of the true cost to housing of each proposed amendment should be conducted by the SBCC prior to adoption. Consequently, we have identified the following areas of specific issues where NAIOP Hawaii requests that the SBCC reject the proposed code amendments for the following reasons:

- 1) The change to <u>C405.2 Lighting controls</u>: Multifamily Residential Common Areas such as corridors and lobbies, should be excluded from occupancy controls. <u>Justification</u>: Lighting controls add significant upfront cost to the price of housing and often yield minimal energy savings. Based on our calculations on the cost of the lighting control system for the corridors and lobbies to the residential Buyers our typical five-story multifamily building, the payback period for the cost of the system is between 8 and 9 years.
- 2) Response to C405.12 End-use metering: This chapter is new to the 2021 IECC. As it applies to multifamily R-2 Occupancies, we are interpreting this additional end-use metering to encompass spaces that are metered off the HECO "House Meter". Spaces include, but are not limited to, lobbies, corridors, stairwells, trash rooms, elevators, mail rooms, manager's office, amenity spaces, etc. The separate categories for sub-metering these spaces are as indicated in Table C405.12.2 (HVAC system(s), Interior lighting, Exterior lighting, Plug loads, Process loads, and Building operations and other miscellaneous loads). It is our opinion that multifamily residential should be exempt from C405.12. Justification: Submetering electrical for these categories within the common area of multifamily residential will add significant upfront cost for the infrastructure, for the on-going monitoring, and storing and reporting of data. (Per section C405.12.4 and 5, data must be kept for each end-use category required for at least each hour, day, month and year for the previous 36 months). The data obtained by sub-metering the common area electrical is easily estimated by other means. For new condominiums, the estimated monthly electrical costs are calculated when developing the overall maintenance cost of the building, and the electrical cost for the spaces and the categories are typically consistent from month to month, with very little variance. If the electrical consumption for these spaces is inconsistent with the estimated consumption, an electrical audit would easily and much more cost effectively be done to verify the electrical consumption by category. In the example of our five-story multi-family buildings, this may include 30 or more sub-metered circuits, per building, larger and more costly electrical circuit boxes that will accommodate the CT readers, additional equipment to receive the data and a dedicated computer to store the data.

Suggested response to SBCC amendments to <u>C406.3.1 Reduced lighting power</u> <u>by more that 10 percent</u>: The SBCC's proposed amendment further reduces the allowable interior lighting power to 20 percent, from the 10 percent allowed by the 2021 IECC. Our opinion is that the C406.3.1 should remain as written in the 2021 IECC, without amendments. <u>Justification</u>: the 2021 IECC is the latest version of the energy code, and thus is the version in which the lighting manufacturers are working to comply with. Thus, any additional reduction will limit the lighting SKUs available to cost effectively meet the new code requirements and may create supply issues. The additional reduction proposed by the SBCC appears to be arbitrary and not based on actual information or costs from lighting manufacturers.

- 3) Response to SBCC amendments to C406.3.2 Reduced lighting power by more that 15 percent: The SBCC's proposed amendment further reduces the allowable interior lighting power to 25 percent, from the 15 percent allowed by the 2021 IECC. Our opinion is that the C406.3.2 should remain as written in the 2021 IECC, without amendments. Justification: the 2021 IECC is the latest version of the energy code, and thus is the version in which the lighting manufacturers are working to meet. Thus, any additional reduction will limit the lighting SKUs available to cost effectively meet the new code requirements and may create supply issues. The additional reduction proposed by the SBCC appears to be arbitrary and not based on actual information or costs from lighting manufacturers.
- 4) Response to SBCC amendments to <u>C406.3.3 Lamp efficacy</u>: The SBCC's proposed amendment increases the lumens per watt allowed beyond what is written on the 2021 IECC. Our opinion is that C406.3.3 should remain as written in the 2021 IECC, without further amendments. <u>Justification</u>: the 2021 IECC is the latest version of the energy code, and thus is the version in which the lighting manufacturers are working to meet. Any additional reduction will limit the lighting SKUs available to cost effectively meet the new code requirements and may create supply issues. The additional reduction proposed by the SBCC appears to be arbitrary and not based on actual information from lighting manufacturers. The proposed efficacy is well beyond what is available today in cost-efficient builder-series lighting.
- 5) Response to SBCC's proposed addition of <u>C409 Electric Vehicle Efficiency</u>: Our opinion is that it is best to leave the EV issue with the Counties, rather than included in the State's Energy Code. <u>Justification</u>: These requirements are already included in Honolulu's version of the Energy Code (Chapter 32 Article 1. Building Energy Conservation Code). What works for Honolulu, may not

work for other counties. If the SBCC does leave the Electric Vehicle requirements into the State's version of the IECC, they should further replicate the language in the current version of the C&C of Honolulu's Building Energy Conservation Code. The SBCC's version removes the language regarding Developer's flexibility to aggregate the points across multiple projects and phases; provided that each individual project achieves no less than 10 percent compliance or adds a minimum of one electric vehicle charger ready parking space per project, whatever is greater.

- R409 Points option, Item 11 (ceiling fans): The SBCC should leave the original language as written from the 2021 IECC. <u>Justification</u>: Ceiling fans add significant upfront cost to new housing. Currently, developers install junction boxes for a ceiling fan to allow the home buyer to choose the ceiling fan that best matches their home décor and personal preference since choosing a ceiling fan is personal. Ceiling fans are easy to install by the home owner after move-in. Ceiling fans, more than lighting, are a personal decorator item that is best left to the home owner to buy and install. The expected replacement of the builder-provided ceiling fans is expected to be prevalent, resulting in ceiling fans in landfills.
- 7) Comment on the **R409 Points option for both Standard Home Points and Tropical Home Points**: It appears that on table 409.1 Points Option, that on the Wood Frame, "No air conditioning install," the 2 points previously provided in the Tropical Home Points has been eliminated. This may be an error on the draft proposed amendments, but this needs clarification.
- 8) Response on proposed revision of **R409.2 Requirements**: The cumulative points that previously were 0 (zero) has been arbitrarily increased to 2 (two) points. This is problematic and will result in additional cost of homes. The justification that the SBCC has provided is that "Building technologies have improved since the section was written. Achieving two points is readily achievable in a cost-effective manner." We disagree that this is cost-effective, there will be added cost as a result of moving the goal line. We recommend leaving the point system as is.

We strongly encourage the SBCC to refrain from moving forward with any decision making on this code until a cost benefit analysis is done on each of the proposed amendments. We appreciate your consideration of our comments and hope to work with you to do the analysis necessary to fully vet and consider the true cost impact of the proposed amendments so that such impacts may be weighed against the perceived

benefits of the proposed changes. We would be happy to discuss our comments with you and any questions you may have.

Accordingly, NAIOP Hawaii opposes this measure due to the impacts that it will have on getting homes built for our residents. Thank you for the opportunity to testify on this measure.

Mahalo for your consideration,

Jennifer Camp, President

NAIOP Hawaii



February 21, 2023

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- 9) Response to amendments in **R401.3.1 (b) relating to installation of smart appliances capable of responding to grid signals**. The primary concern is that no manufacturer currently has product to fulfill this requirement. Mandating a product that is currently not available is impracticable and impossible to comply with.

10) Response to amendments to <u>Section 408 relating to Solar and EV readiness</u>. The city is asking that plans show all design details for a 5KW system. Currently, permitted plans do not have stamps from electrical consultants which would increase costs for developers to hire such a consultant to draw the plans. Further, architects that design the plan will not warrant said plans if another contractor installs the system. Moreover, PV and solar contractors will not utilize the conduit installed by another contractor and will not warrant conduit that they did not install. Lastly, the measure mandates the installation of 1.5" PVC conduit which is too rigid and will not snake through the house. Ultimately, these mandates operate as another tax on our residents and will only further increase the cost to build homes in Hawaii.

We strongly encourage the SBCC to refrain from moving forward with any decision making on this code until a cost benefit analysis is done on each of the proposed amendments. We appreciate your consideration of our comments and hope to work with you to do the analysis necessary to fully vet and consider the true cost impact of the proposed amendments so that such impacts may be weighed against the perceived benefits of the proposed changes. We would be happy to discuss our comments with you and any questions you may have.

Accordingly, NAIOP Hawaii opposes this measure due to the impacts that it will have on getting homes built for our residents. Thank you for the opportunity to testify on this measure.

Mahalo for your consideration,

Jennifer Camp, President

NAIOP Hawaii



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.

MARK B. GLICK CHIEF ENERGY OFFICER

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Testimony of MARK B. GLICK, Chief Energy Officer

before the CITY COUNCIL, CITY AND COUNTY OF HONOLULU

Wednesday, February 22, 2023 10:00 AM City Council Chambers and Videoconference

In support of

Bill 4 (2023)

RELATING TO ADOPTION OF THE STATE ENERGY CONSERVATION CODE.

Chair Waters and Members of the Council, the Hawaii State Energy Office (HSEO) supports the adoption of Bill 4 (2023), relating to the adoption of the State Energy Conservation Code.

HSEO's testimony is guided by its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, decarbonized economy.

As affordable housing is an imperative for the State as well as for the City, we would like to highlight several features of Bill 4 aimed at reducing construction costs.

C402.2.2, Above grade walls, exempts builders from the 2018 IECC requirement of specifying R 5.7 continuous insulation on the exterior of mass (concrete) walls by allowing three alternative compliance paths. This provision takes advantage of Hawai'i's mild climate.

C 405.2, Lighting controls, exempts builders from installing potentially expensive lighting controls involving time switching and daylighting, provided the lighting power density is twenty percent lower than 2018 IECC levels. Given the significant improvements to LED lamps, a twenty percent improvement in efficacy is readily achievable.

R402.2.5, Mass walls, allows exterior residential walls to comply via three alternate paths, taking advantage of Hawai'i's mild climate.

Table R 402.1.3 (d), Floor R-value, eliminates the requirement for R-13 insulation in residential floors in recognition of Hawai'i's very low temperature difference between interior and exterior temperatures and reducing construction costs by several thousand dollars.

R404.1.2, **High-efficiency lamps**, raises the minimum efficiency of common service lamps (light bulbs) above 2018 IECC levels. Higher efficiency allows specification of lowerwattage lamps or fewer lighting fixtures, both of which lower construction costs and take advantage of the rapid improvement of LED lamps.

Thank you for the opportunity to testify on this bill.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

JOSH GREEN, M.D.

MARK B. GLICK CHIEF ENERGY OFFICER

235 South Beretania Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: Web: (808) 587-3807 energy.hawaii.gov

Testimony of MARK B. GLICK, Chief Energy Officer

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Bill 4 (2023)
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HONOLULU CITY COUNCIL Honolulu Hale 10:00 AM

February 22, 2023

RE: Bill 4 (2023) - RELATING TO THE STATE ENERGY CONSERVATION CODE

Chair Waters, Vice Chair Kiaaina, and members of the Council:

My name is Greg Thielen, Codes Committee Chair of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA Hawaii is in opposition to portions of the proposed Energy Code, and offers the following comments to address these objections.

BIA Hawaii and our individual members have been engaged with the Office of Climate Change Sustainability and Resilience (OCCSR) on these Energy Code amendments for the last 7 months. We appreciate the level of outreach OCCSR provided as well as our successful collaboration on much of what is now being proposed. Nevertheless, we continue to take issue with some of this Energy Code as written. The bottom line is that all of these amendments are more stringent than both the original model code as well as the State of Hawaii approved Energy Code. More stringent equals more expensive and we can't afford to make housing more expensive than we must. Despite the added cost, BIA only objects to the following specific amendments:

We OBJECT to sections C402.2.2 and R402.2.5 as written. These sections deal with thermal resistive value of above grade walls. We have two objections to these portions as written. First, exception 1 should change the words "solar reflectance" to "light resistive value" (LRV). While these words have substantially similar meanings, every paint manufacturer assigns and lists the LRV of each paint color. This simple change will make the code and compliance simpler and more effective. Secondly, exception 3 should be modified to delete the words "where a natural masonry surface is used". There is no accepted definition of a natural masonry surface leaving this portion open to interpretation.

We STRONGLY OBJECT to section 408.2.4.1 Acceptance of Reports and section 408.3.1 Functional Testing. These two mandated steps will add significant consulting cost and slow the already cumbersome Certificate of Occupancy process.

We OBJECT to Appendix CB Honolulu Stretch Code. We recognize this code is optional, however the intention behind this portion of the code was to offer a "carrot and stick" approach. Where is the carrot?

We STRONGLY OBJECT to the entire R401.3 Large Home Compliance section. First off, this portion as written can apply to any home of any size provided even one room has air conditioning. This means very small homes are affected by the Large Home Compliance Section. Secondly, there is no nexus between home size and energy consumption. It is our experience that many Oahu home owners are turning to multi-generational homes in the face of our increasing housing crisis and those people will be the most

affected by this language. Finally, some of the mandates in this section do not even exist, such as smart appliances capable of responding to grid signals.

We STRONGLY OBJECT to section 408 Solar and Electric Vehicle Readiness as written. To be clear, most of the actual field work required is not objectionable, but the construction documentation requirements are both expensive and impractical. There are two very relevant points when reviewing this section. First and foremost the lack of "readiness" in existing homes does not hinder the installation of PV systems and vehicle chargers. This is clear, as the vast majority of work this industry performs is on homes that aren't readiness-equipped. Secondly, these mandates are a tax on all new homes, but only the wealthy that can afford PV and Tesla's will avail themselves of this benefit. BIA Hawaii is willing to work with other stakeholders on arriving at more acceptable language for this section.

The state of Hawaii is in a dire housing crisis. As the Honolulu City Council is aware, the cost of housing in Hawaii is extremely high, with Oahu's median price of homes being currently over \$1 million. Approximately 153,967 U.S. households are priced out of buying a home for every \$1000 increase in price, according to the National Association of Home Builders (NAHB).

We appreciate the opportunity to express our concerns on Bill 4.