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STATE OF HAWAII

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

Tuesday, February 10, 2021
2:00 PM
State Capitol, Conference Room #329

Comments in consideration of
HB 556 HD1
RELATING TO ENERGY EFFICIENCY.

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on HB 556 HD1 which would (1) require voting members to have experience in energy efficiency standards, and (2) require the counties to amend or adopt energy efficiency codes no later than one year after adoption of the Hawai‘i state building energy conservation code.

The HSEO is in agreement with the provision in Section 2 of the bill that at least one voting member shall have expertise in building energy efficiency standards, and that at least one voting member shall have experience in sustainable building, design, construction, and operation. Such a requirement is quite similar to existing provisions in the current statutory language, and it is the HSEO’s observation that such expertise exists within the current council’s makeup.

Section 3 of the bill requires the counties to adopt their energy codes no later than a year following State Building Code Council adoption. Although the HSEO appreciates the intent, it raises the concern that the county building departments may be challenged with the tasks of amending the code in accord with their unique circumstances, gaining administration support, introducing legislation, serving as subject matter experts at public meetings and testifying before county councils and

committees until adoption is achieved, all within the one-year adoption cycle. HSEO defers to the counties on this matter.

For the Committee's information, the State Building Code Council adopted the 2018 International Energy Conservation Code (IECC) on December 15, 2020, and the HSEO will commence training shortly. The 2021 IECC was published in January, 2021 and the State Building Code Council will commence meetings on the 2021 IECC later this year. HSEO is preparing to convene a working group to support the State Building Code Council to develop Hawaii amendments to the 2021 IECC.

Thank you for the opportunity to testify.

Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 10, 2021 — 2:00 p.m.

Ulupono Initiative supports HB 556 HD 1, Relating to Energy Efficiency

Dear Chair Johanson and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

Ulupono supports HB 556 HD 1, which requires that the State Building Code Council include voting members with experience and knowledge in building energy efficiency standards and sustainable building, design, construction, and operation. This bill also requires that the counties amend or adopt their respective building codes and standards based upon the International Energy Conservation Code no later than one year after the adoption of the Hawai'i state building energy conservation code.

Ulupono supports expanding the membership of the State Building Code Council to include voting members with experience and knowledge in building energy efficiencies and sustainability. Requiring the counties to adopt building codes in a timely manner following the State's lead is extremely important to align with the three-year national code update cycle. By maintaining a current building energy conservation code at both the State and county level, Hawai'i is providing a more resilient future for our community.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
February 10, 2021, 2:00 P.M.
Video Conference

TESTIMONY IN SUPPORT OF HB 556 HD1

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the Committee:

Blue Planet Foundation **supports HB 556 HD1**, which improves the process for updating energy conservation building codes in Hawai‘i and ensures that energy efficiency and green building design, which can lower monthly financial burdens for residents and businesses while also lowering their carbon footprint, are not dismissed or overlooked in the process. This bill adopts two best practices from other jurisdictions that have led the way on energy-efficient building:

(1) Requires that the state building code council (SBCC) include voting members with experience and knowledge in building energy efficiency standards and sustainable building, design, construction, and operation; and
(2) Updates the overall timeline for amending or adopting building energy conservation codes to bring Hawai‘i’s code adoption process in alignment with the three-year national code update cycle.

States across the country, including California, Massachusetts, Vermont, and Oregon, have already incorporated these best practices into their building energy code adoption pathways. According to the American Council for an Energy-Efficient Economy’s (ACEEE’s) annual ranking of energy efficiency policies and programs, these are among the most energy efficient states in the country. For 2020, ACEEE ranked these states first, second, third, and ninth, respectively.[1] Hawai‘i is ranked fourteenth, and HB 556 offers an opportunity for Hawai‘i to move up in the ranks to the benefit of the state’s residents and businesses, who pay the highest electricity rates in the nation.

Codes reduce energy consumption and lower utility bills

Building codes have direct and indirect impacts on our wellbeing and quality of life. By establishing and regularly updating uniform state and county building codes, Hawai‘i can ensure

[1] *See* ACEEE State Energy Efficiency Scorecard, https://www.aceee.org/state-policy/scorecard.

that building design, construction, and operation address society's most important concerns, including public health and safety, environmental protection, and consumer protection against costly monthly utility bills.

The primary function of energy codes is to reduce energy consumption in buildings, which reduces greenhouse gas emissions and pollution from burning fossil fuels. Energy codes can also lessen peak energy demand and reduce our reliance on imported energy sources, which increases utility system reliability and energy security, respectively. Moreover, energy codes create a more comfortable living and working environment through improved indoor air quality. They also help occupants save money by reducing energy bills, which stimulates the economy. For example, the anticipated energy savings arising from the 2015 International Energy Conservation Code (IECC) were calculated in a May 2016 report prepared for the State of Hawai'i Department of Business, Economic Development & Tourism to total over $1.4 billion.[2]

Leading states require sustainability and green building expertise

House Bill 556 adopts the best practice seen in other states of requiring energy conservation and sustainability expertise on the council, committee, or commission responsible for reviewing code updates.

The SBCC in Hawai'i oversees the adoption of various portions of the state's building codes, including the energy code. Because the SBCC oversees a such broad range of building codes, the energy conservation code is often lower on the council's priority list for adoption. Further, although one spot on the SBCC is reserved for a representative from the State Energy Office, there is no explicit statutory requirement—as there is in other states—that council members have experience in building energy efficiency standards or sustainable building design. Thankfully, the current SBCC composition includes at least one member with such expertise, but that may not always be the case. The expertise specified in HB 556 can help ensure that energy is not relegated to a last-place priority among the SBCC's other building code matters and avoid knowledge gaps in future council compositions.

Other states make energy expertise explicit. In California, for example, primary responsibility for updating energy codes is delegated to the Energy Commission. This commission includes mandatory expertise in energy systems, environmental protection, and natural resource management. The code-update process is broadly overseen by the Building Standards Commission, which must include at least one member experienced with energy efficiency standards, and at least one member with experience in sustainable building, design, construction, and operation. Similar energy and energy conservation expertise requirements are in place in Oregon, Massachusetts, and Vermont.

[2] *Energy Savings Forecast for the 2015 International Energy Conservation Code with Hawai'i Amendments*, The Cadmus Group, Inc., prepared for DBEDT, May 2016, https://energy.hawaii.gov/wp-content/uploads/2016/07/Energy-Savings-Forecast.pdf.

Hawai‘i lags behind other states in adopting building energy codes

States across the country use these national model codes and standards as a starting place for adopting state-specific versions based on their unique characteristics and climates. Like other states, Hawai‘i develops its building energy code based upon the IECC. A governing body—the International Code Council—produces an updated version of the IECC through a democratic and deliberative process every three years. As noted by the Environmental and Energy Study Institute, “[t]he process of updating model codes every three years is optimal to ensure new technologies, materials and methods, as well as better approaches to health and safety, can be incorporated into the next generation of buildings with sufficient time for proof of performance.”[3]

Hawai‘i, however, has historically operated on a much slower timeline. The most recent version adopted by the state was the 2015 IECC, which replaced the 2006 IECC that was in effect at the time the 2015 version was adopted. In Hawai‘i, adoption of the state building code is just the first step—it must subsequently be adopted by all four counties. The adoption at the county level has lagged even further. For example, the City and County of Honolulu did not formally update its modified version of the 2015 IECC until June 2020.

This lag is, in fact, embedded in the building code statute itself. By statute, the Hawai‘i state building energy conservation code must be adopted by the SBCC within two years of the publication date of the national model code. Then, the state code must be adopted by the counties within two years following the SBCC’s adoption. In essence, this timing translates to a statutory framework in which counties are required to amend or adopt their county building codes within four years of the publication date of the model code. This four-year timeframe in statute keeps Hawai‘i lagging behind the national and other states’ code update cycles (See Figure 1 below for a comparison of update cycles in various jurisdictions).

House Bill 556 remedies this faulty timeline by ensuring the entire update cycle—from national publication to county adoption—does not exceed three years (i.e. the same frequency as national code updates). Mirroring the national code update cycle will ensure that construction in Hawai‘i—and the buildings that will remain in our building stock for decades to come—can keep pace with changing technology and the state’s clean energy and climate goals.

Conclusion

Most individuals spend a majority of their lives inside buildings. Yet buildings are often overlooked as important levers for influencing our safety, health, and economic and environmental quality of life. Not only can high-performing buildings lead to lower monthly utility bills, energy efficiency is also the cheapest, quickest, and cleanest way to accelerate the transition to 100% renewable energy.

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[3] Vaughn, Ellen and Jim Turner, *The Value and Impact of Building Codes*, 2013, https://www.eesi.org/files/Value-and-Impact-of-Building-Codes.pdf.

House Bill 556 helps to ensure that we are building for the future, not the past. Improving the process for updating building energy codes should be part of Hawai‘i’s journey to rebuild better in response to the COVID-19 pandemic.

We respectfully request that the Committee forward HB 556 HD1, amended to take effect upon approval. Thank you for the opportunity to provide testimony.

Figure 1. Frequency of Energy Code Updates for States and the IECC