



Testimony of
Gwen Yamamoto Lau
Executive Director
Hawaii Green Infrastructure Authority
before the
House Committee on Finance
Tuesday, February 25, 2025, 10:00 AM
State Capitol, Conference Room 308
in consideration of
House Bill No. 1467, HD2
RELATING TO HOUSING RESILIENCY

Chair Yamashita, Vice Chair Takenouchi and Members of the Committee:

Thank you for the opportunity to testify and provide comments on House Bill 1467, HD2 relating to Housing Resiliency. The Hawaii Green Infrastructure Authority (HGIA) is in **strong support** of this bill which establishes the Strengthen Hawaii Homes Program.

Serving as a member of the Climate Advisory Team over the past six months has heightened my awareness of the devastating impacts of disasters and underscored the importance of investing in pre-disaster preparedness to mitigate future losses and long-term recovery.

While only a Category-1 storm, Hurricane Iwa was one of Hawaii's most damaging hurricanes when it hit Kauai in November 1982, with approximately \$250.0 million in property damages, which was a record at that time. Ten years later, in September 1992, Category-4 hurricane Iniki wreaked havoc on Kauai with approximately \$3.1 billion in damage. 41% of Kauai's 15,200 homes were damaged or destroyed, seven people were killed and 100 were injured as Iniki brought winds of 130-160 miles per hour.

Hurricane clips and straps were not mandated for new construction in Hawaii until 1994. As such, approximately 64% or 125,000 single-family homes on Oahu have no hurricane protections. Maui and Hawaii County are likely in a similar situation. While there may be concerns about using public funds to strengthen private property, we have learned from the Lahaina wildfire that taxpayers will bear the post-disaster cost of supporting and housing victims, which approximates **\$10,000 per month** for a family of four. Preventative measures such as this will enable more families to shelter in place during and after the next hurricane.

Due to the destruction caused by Hurricane Ivan in 2004, followed by Hurricane Katrina a year later, in 2011, the Alabama State Legislature established the Strengthen Alabama Homes Program to assist AL homeowners in retrofitting and upgrading their homes to minimize hurricane or high wind related property loss by adopting the FORTIFIED™ program as its retrofitting standard. In 2020, some 17,000 Alabama homes were FORTIFIED, and 95% of these homes saw little or no damage from Hurricane Sally.

Thirteen years after the Strengthen Alabama Homes Program ("SAHP") launched, some 50,000 homes in the state of Alabama have received FORTIFIED certification. According to Alabama Insurance Commissioner Mark Fowler, "*The FORTIFIED program has meant fewer blue*

tarps on homes after storms. It has meant communities can go back living quicker instead of spending time rebuilding their neighborhoods and businesses.”

SAHP provides grants up to \$10,000 for residential wind mitigation on existing, owner-occupied, single-family homes. In addition to a more resilient home, homes with a FORTIFIED designation in Alabama receive discounts on the wind portion of their homeowner's insurance premium.

While climate change has not increased the number of hurricanes on an annual basis, it is resulting in more intense storms with higher wind speeds, heavier rainfall and more severe storm surges. While Hawaii (Oahu in particular) was extremely lucky in 2018 when Hurricane Lane swerved off its path towards the island, it is no secret that the significant number of homes without hurricane protection will equate to thousands of families being displaced in the wake of a hurricane. Like Alabama, Hawaii must make a significant investment to fortify homes to mitigate property losses, save lives and minimize disruption in our communities.

Additionally, the roofs of many of these older homes are not able to bear solar. Fortifying these homes will also make them “solar-ready” enabling HGIA to provide inclusive financing to eligible ratepayers to install solar+storage systems to lower their energy burden and further increase their resiliency, in alignment with the Governor's Executive Order 25-01 and the state's clean energy goals.

We support the measure so long as it does not adversely impact priorities identified in Executive Budget Request for FY2026 and defer to HHFDC on implementation related comments. Thank you for this opportunity to testify in strong support of HB 1467, HD2.



Hawai'i Climate Advisory Team

To: Rep. Kyle T. Yamashita, Chair
Rep. Jenna Takenouchi, Vice Chair
House Committee on Finance

From: The Climate Advisory Team

RE: **HB1467, HD2 - Relating to Housing Resiliency - In Strong Support**
Tuesday, February 25, 2025; 10:00 a.m.; Conference Room 308 & Videoconference

Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee,

Mahalo for the opportunity to testify **in strong support** of HB1467, HD2 relating to housing resiliency and the Strengthen Hawai'i Homes program. This program would significantly increase Hawai'i's residential resilience against extreme weather events like hurricanes and windstorms by helping residents fortify their homes through retrofitting, providing critical protections that allow residents to shelter safely in their homes during disasters.

The Hawai'i Climate Advisory Team (CAT) is a volunteer group, convened by Governor Green to develop community-informed policy recommendations to help make Hawai'i more resilient to natural disasters. The CAT published its findings and recommendations in a [policy paper](#) in January 2025, which provides detailed context for the measures we are supporting this legislative session.

Establishing the Strengthen Hawai'i Homes program is one of the highest priority recommendations of the CAT. This proposed program is modeled on the highly successful Strengthen Alabama Homes program, which has directly helped over 8,000 homeowners increase their property's hurricane and wind damage resilience through retrofit grants. Moreover, the Alabama program has had a multiplier effect attributable to increased awareness of the grant program, resulting in an additional 57,000 Alabama homes being upgraded by their owners without grant funding, or about seven times the number funded by the state.

The CAT recognizes there are questions as to whether funds dispersed under the Strengthen Hawai'i Homes program should be provided as grants or low-interest loans. Based on the CAT's analysis and discussions with the National Association of Insurance Commissioners (NAIC), which has helped nearly two dozen states develop similar programs, we recommend the program be administered as a grant for several reasons:

- **Faster and More Widespread Adoption:** The CAT's review of other state programs finds that home retrofit programs structured as grants encourage more widespread adoption and increase



Hawai'i Climate Advisory Team

participation rates. A home retrofit loan program would require residents to take on debt, which may deter participation, especially among lower-income households or those with limited financial flexibility or credit constraints. Hawai'i's residents already face high costs of living, and for many, taking on new debt is not a feasible financial burden. If the goal is to get as many Hawai'i homes retrofitted in the shortest timeframe possible, the CAT advises administering the program's funds as grants so the program is as equitable and accessible as possible to residents.

- **Decreased Administrative Costs to the State:** Loans generally have higher administrative costs than grants due to loan servicing requirements, financial assessments that must be done before providing the loan, and ongoing legal and compliance costs. Several provisions in HB1467, HD2 stipulate strict requirements the grant applicant must adhere to in order to qualify for a grant to prevent misuse of funds. The bill also notes that grant funds will not be paid to a contractor who has performed a home retrofit until a certificate has been issued for the FORTIFIED standard, which is the home building standard that the Alabama legislature required as part of its successful home retrofit program, or any similar standard approved by the department. These elements would help ensure the program's grants directly fund completed retrofits and avoid unnecessary overhead costs incurred by the state.
- **Ripple Effect of Economic and Community Benefits:** As seen with the Strengthen Alabama Homes program, the state's investment in a home retrofit grant program had a significant multiplier effect that catalyzed private spending on retrofits. The program, once scaled, would provide an economic stimulus to the state through its employment of local tradespeople and train a workforce to higher building standards. In addition, the state incurs significant costs when disasters strike to temporarily shelter residents whose homes were destroyed. Each retrofitted home has the potential to save lives and reduce the burden on public shelters in the event of a hurricane or other high-wind event, making more services available to the remainder of the population.

Most homes in Hawai'i were built before hurricane protections were required and are highly vulnerable to wind and water damage. 64 percent of O'ahu's single-family homes — around 125,000 houses — lack any kind of hurricane protection. Home retrofits for greater wind resilience and rising flood waters can materially increase the safety of the residents and reduce expected losses in the event of a hurricane. The lack of wind-resistant homes is one of Hawai'i's greatest vulnerabilities when it comes to hurricanes, which are expected to become more frequent and severe due to climate change.

The investment needed to make a substantial dent in the number of vulnerable homes is significant; the CAT estimates addressing all wind-vulnerable homes in Hawai'i could cost nearly \$5 billion. This bill



Hawai'i Climate Advisory Team

would build a critical foundation by establishing Hawai'i's home retrofit pilot program and would enable the state to identify best practices and scale the program efficiently over time.

The safer we can make people in their own homes and communities, the fewer lives will be lost and the fewer public resources will be needed to care for those displaced by disasters.

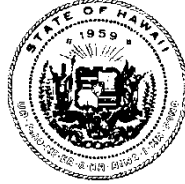
Thank you for the opportunity to testify before your committee in strong support of HB1467, HD2.

With aloha,

The Climate Advisory Team

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR



DEAN MINAKAMI
EXECUTIVE DIRECTOR

STATE OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT AND TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
FAX: (808) 587-0600

Statement of DEAN MINAKAMI

Hawaii Housing Finance and Development Corporation
Before the

HOUSE COMMITTEE ON FINANCE

February 25, 2025 at 10:00 a.m.
State Capitol, Room 308

In consideration of
H.B. 1467 HD2
RELATING TO HOUSING RESILIENCY.

Chair Yamashita, Vice Chair Takenouchi, and members of the Committee.

HHFDC **supports** HB 1467 HD2, which establishes the Strengthen Hawaii Homes Program within the Department of Business, Economic Development, and Tourism to administer grants to retrofit residential properties to enhance resilience against disaster impacts and reduce potential insurance liabilities. It also appropriates funds. HHFDC supports the measure so long as it does not adversely impact priorities identified in the Executive Budget Request for FY 2026.

We offer the following comments:

The Strengthen Hawaii Homes Program which targets the Insurance Institute for Business and Home Safety FORTIFIED roof, FORTIFIED silver, and FORTIFIED gold standards has not been implemented previously in Hawaii. Significant coordination between the State, each of the four counties, building industry and the insurance industry to review and assure compliance with each entity's jurisdictional function, responsibilities and legal requirements will be required. Establishment and subsequent implementation of the program will rely heavily on third parties to assist in the development and administration of the program. Hawaii does not have a network of certified evaluators to inspect properties, as required in the bill, or contractors familiar with the FORTIFIED program. As such, it will take time to implement the program.

Additionally, the FORTIFIED standard addresses wind and hail protection. Implementation of the program will not address hazards such as earthquakes, wildfires, flooding, tidal waves or landslides. A more comprehensive standard will be necessary to address resilience to a larger range of disasters. Such a standard would need to be developed in collaboration with local construction and insurance industry experts.

Although the measure allows for delegation to a third party to operate and manage the program, HHFDC may be involved in oversight of the program. Significant collaboration with building industry groups, contractors, and the insurance industry will be needed to establish and implement a local program that addresses the wide range of disasters contemplated by this bill. We request \$175,000 for one full-time equivalent (1.0 FTE).

Thank you for the opportunity to testify on this bill.

OFFICE OF INFORMATION PRACTICES

STATE OF HAWAII
NO. 1 CAPITOL DISTRICT BUILDING
250 SOUTH HOTEL STREET, SUITE 107
HONOLULU, HAWAII 96813
TELEPHONE: 808-586-1400 FAX: 808-586-1412
EMAIL: oiip@hawaii.gov

To: House Committee on Finance

From: Carlotta Amerino, Director

Date: February 25, 2025, 10:00 a.m.
State Capitol, Conference Room 308

Re: Testimony on H.B. No. 1467, H.D. 2
Relating to Housing Resiliency

Thank you for the opportunity to submit testimony on this bill, which would establish a Strengthen Hawaii Homes Program to provide grants for individual homeowners to retrofit their homes against disasters. The Office of Information Practices (OIP) previously testified regarding a confidentiality provision for grant application information, but that provision was removed and is not in the H.D. 2 version of this bill. OIP has no further concerns regarding this bill.



February 25, 2025

The Honorable Kyle T. Yamashita, Chair

House Committee on Finance

State Capitol, Conference Room 308 & Videoconference

RE: House Bill 1467, HD2, Relating to Housing Resiliency

HEARING: Tuesday, February 25, 2025, at 10:00 a.m.

Aloha Chair Yamashita, Vice Chair Takenouchi, and Members of the Committee:

My name is Lyndsey Garcia, Director of Advocacy, testifying on behalf of the Hawai'i Association of REALTORS® ("HAR"), the voice of real estate in Hawaii and its over 10,000 members. HAR **supports** House Bill 1467, HD2, which establishes the Strengthen Hawai'i Homes Program within the Department of Business, Economic Development, and Tourism to administer grants to retrofit residential properties to enhance resilience against disaster impacts and reduce potential insurance liabilities. Appropriates funds. Effective 7/1/3000.

As an island state, Hawaii is uniquely vulnerable to extreme weather events, such as hurricanes or strong windstorms, which can cause devastating damage to residential properties. As such, we support initiatives that encourage homeowners to make structural improvements that can significantly mitigate the risk of property loss, reduce costly repairs, and enhance the overall safety of our communities in the event of a hurricane.

Additionally, our state grapples with a significant challenge concerning insurance accessibility and rising costs. The market for reinsurance is global; therefore, storms, wildfires, and other natural disasters that strike anywhere in the world impact what homeowners must pay for coverage in Hawaii as well. By aligning this program with the Insurance Institute for Business and Home Safety Fortified Homes Program, homeowners who undertake these critical retrofits may also benefit from lower insurance premiums.

Mahalo for the opportunity to provide testimony on this measure.



MAKAKILO/KAPOLEI/HONOKAI HALE NEIGHBORHOOD BOARD NO. 34

c/o NEIGHBORHOOD COMMISSION • 925 DILLINGHAM BLVD SUITE 160 • HONOLULU, HAWAII, 96817
PHONE (808) 768-3710 • FAX (808) 768-3711 • INTERNET: <http://www.honolulu.gov>

RESOLUTION

**REQUESTING THE HAWAII LEGISLATURE TO ENHANCE HURRICANE
PREPAREDNESS FOR THE STATE**

Whereas, the Makakilo/Kapolei/Honokai Hale Neighborhood Board No. 34 ("Board") is a citizens' advisory board whose purpose is to "increase and assure effective citizen participation in the decisions of government" per the City and County of Honolulu's Neighborhood Plan of 2008; and

Whereas, on December 1, 2021, a focused meeting on hurricane preparedness was held by the Makakilo/Kapolei/Honokai Hale Neighborhood Board No. 34, led by the Environmental Justice Committee and Committee Chair Dr. Kioni Dudley, during which multiple experts shared insights that form the basis of hurricane related clauses in this resolution; and

Whereas, on February 26, 2022, the Board passed a resolution "Supporting Efforts for Increased Disaster Preparedness Especially for Hurricanes"; and

Whereas, climate change has caused sea temperatures to rise, resulting in the northward shift of hurricane spawning grounds previously located off Mexico's coast, bringing storms directly toward Hawaii that once passed far to the south; and

Whereas, rising sea temperatures are causing hurricanes to grow stronger, with an increase in the frequency and intensity of Category 3, 4, and 5 storms; and

Whereas, Super Category 5 hurricanes with winds exceeding 200 mph occur approximately every eight years, and it is estimated that by 2080, one such storm is expected every year globally, with the northern Pacific, including Hawaii, predicted to be the most affected; and

Whereas, Hawaii used to be protected by cooler surrounding seas and by tradewinds at a lower level and strong winds in the opposite direction at a higher level which would tear approaching hurricanes apart, but those seas have now warmed and, having lost two days of tradewinds each year for fifty years, we now have their protection only on half of the days of the year; and

Whereas, Hawaii's current shelters do not meet hurricane safety standards, and many refuge areas are only capable of withstanding up to a Category 2 hurricane; and

Whereas, there are only 32 designated refuge areas in Hawaii, capable of sheltering 100,000 people, but in the event of a Category 1 hurricane, up to 200,000 people may seek



refuge, leaving many without adequate shelter; and

Whereas, Hawaii is home to approximately 187,000 wooden homes, many of which would suffer significant damage or destruction even from a Category 1 hurricane, and there are no shelters currently capable of withstanding Category 3, 4, or 5 storms, leaving no safe places in the event of such a disaster; and

Whereas, the Board observes that the current government approach appears to rely on recovery efforts following a major hurricane, rather than prioritizing proactive measures to protect lives and property in advance, and therefore advocates for a shift toward such preventative actions; and

Whereas, the Board recognizes the profound moral obligation to future generations to begin fortifying buildings today, ensuring that all homes and structures are capable of withstanding 200 mph+ winds, which will likely become more frequent; and

Whereas, Neighborhood Boards are entrusted with the responsibility to convey the concerns and desires of the community to higher levels of government, and these concerns should be seriously considered by lawmakers; and

Resolved, that the Makakilo-Kapolei-Honokai Hale Neighborhood Board No. 34 formally requests the Hawaii State Legislature to consider:

1. Providing an income tax credit of up to \$20,000 for homeowners to retrofit their residences with wind-resistant features.
2. Allocating funding for low-income homeowners to retrofit their homes to withstand stronger storms.
3. Funding an office and staff to oversee the completion of home fortification projects, process funding applications, and approve tax credits.
4. Passing legislation requiring that all new homes in Hawaii be built to withstand at least a Category 3 hurricane, and include a connected safe room and bathroom capable of surviving Super Category 5 (200 mph+) winds.
5. Passing legislation mandating that all high-occupancy buildings in Hawaii be designed to withstand Super Category 5 hurricanes and serve as storm shelters.
6. Passing legislation requiring new schools that have been approved but not yet built to include rooms capable of withstanding Super Category 5 hurricane winds.
7. Providing additional staff to HI-EMA to secure military funding for fortifying off-base schools that serve military families.
8. Establishing a tourism green fee and allocating 20% of the revenue to fund the strengthening of classrooms and shelters in schools to withstand 200 mph+ hurricane winds; and

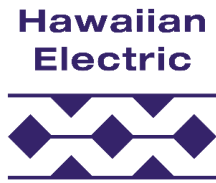
Resolved, that this Resolution, without further approval, should be submitted as formal testimony by the Board for all hearings related to these matters at the federal, state, and county levels; and



Ordered, that copies of this resolution be transmitted to the Mayor of the City and County of Honolulu, Honolulu Council Members, HI-EMA, Speaker of the House, President of the Senate, Area Legislators, and all Neighborhood Boards.

Adopted by the Makakilo/Kapolei/Honokai Hale Neighborhood Board No. 34 at its December 4, 2024 Regular Board Meeting, 9-0-0 (Aye: Bossler, Dudley, Ferreira, Kahele, Khan, Lidstone, Singleton, Taala, Paris; Nay: None; Abstain: None)





HOUSE COMMITTEE ON FINANCE

February 25, 2025, 10:00 a.m., Room 308

Testimony in strong support of HB 1467 HD2

Aloha Chair Yamashita, Vice Chair Takenouchi, and members of the Finance Committee:

As partners of Climate Hawai'i, an initiative of the Hawai'i Executive Collaborative (HEC), we strongly support **HB 1467**, which establishes the Strengthen Hawai'i Homes Program to provide grants for homeowners to retrofit their residences against disasters. As climate change intensifies the risks of hurricanes, wildfires, and flooding, this program is a proactive, cost-effective, and critical investment in Hawai'i's long-term resilience, public safety, and economic stability.

Why Housing Resilience is Critical for Hawai'i

The threat of extreme weather events is growing, and Hawai'i remains highly vulnerable to climate disasters. Most homes in our state were built before modern building codes required hurricane protections, leaving thousands of families at risk. More than 125,000 homes on O'ahu alone lack any hurricane protections. A major storm could displace thousands of families and cost the state many billions in recovery efforts.

A grant program such as the one proposed in this measure is a proven disaster mitigation strategy. Alabama's similar Strengthen Alabama Homes Program has helped over 50,000 homeowners retrofit their properties, significantly reducing storm damage and cutting insurance costs for residents. This model works, and it makes good sense for Hawai'i to implement a similar solution to prepare for the coming climate storms.

Key Benefits of HB 1467

- *Protects Homeowners and Communities:* Retrofits strengthen homes, allowing residents to shelter in place safely during storms, reducing displacement and economic disruption.
- *Lowers Insurance Costs:* Homes built to FORTIFIED™ or similar standards qualify for insurance discounts, reducing long-term costs for homeowners.
- *Reduces Disaster Recovery Costs:* Every \$1 invested in disaster resilience saves \$6 in post-disaster recovery costs.
- *Creates Local Jobs:* Strengthening homes requires skilled labor, expanding workforce opportunities for Hawai'i's construction and trades industries.
- *Aligns with Climate and Clean Energy Goals:* Strengthened homes can support solar and energy efficiency upgrades, improving both climate resilience and energy security.

The Cost of Inaction

Hawai'i's existing housing stock is simply not prepared for the increasing frequency and intensity of storms due to climate change—the risk landscape has changed. Without proactive retrofitting, insurance costs will continue to rise, and families will face greater financial hardship in the wake of disasters. Programs like Strengthen Hawai'i Homes empower homeowners to protect themselves before disaster strikes, reducing reliance on government-funded disaster relief while keeping families safe.

As Climate Hawai'i partners, we believe that building resilience is one of the smartest investments Hawai'i can make to prepare for the climate challenges ahead. House Bill 1467 represents a practical, high-impact solution that will protect families, reduce financial burdens, and strengthen our entire state's disaster preparedness.

We urge the Committee to pass HB 1467.

Mahalo for your leadership and the opportunity to testify.

About the Hawai'i Executive Collaborative

The Hawai'i Executive Collaborative (HEC) is a nonprofit organization that serves as a convener and provides backbone support to leaders from different sectors who want to help build a more resilient economy and state. HEC members believe in the power of acting collectively and focus their energies and resources on areas where immediate and systemic changes will benefit Hawai'i and the world. For more information on Climate Hawai'i's real-world, high-impact solutions, please visit climatehawaii.earth.

Hawai'i Executive Collaborative Climate Hawai'i partners supporting this testimony:

- Hawaiian Electric
- Zephyr
- aio
- Sun Noodle
- County of Kaua'i
- Hua Nani Partners
- Chaminade University
- Manoa Valley Theatre
- Young Brothers
- Blue Planet Foundation
- Bowers + Kubota
- HEI
- Catholic Charities Hawaii
- Elemental Impact
- AES Hawai'i