



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

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Testimony of
SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Thursday, February 11, 2021
2:00 PM
State Capitol, Conference Room 329

Comments in consideration of
HB 860 HD1
RELATING TO ROOFTOP SOLAR INSTALLATIONS.

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on HB 860 HD1, which would assign to HSEO the responsibility for granting variances for “a new single-family dwelling that is part of a development of twenty or more dwellings and does not include a rooftop solar energy generation system” and states that a variance application shall be accepted “if submitted by an architect or electrical engineer.. who attests that..” and lists two possible attestations.

HSEO’s comments are guided by HSEO’s mission to promote energy efficiency, renewable energy, energy resiliency, and clean transportation to help achieve a decarbonized economy. HSEO appreciates the intent of the proposal to make better use of the energy that is delivered to rooftops in Hawaii on a daily basis, in order to help Hawaii to reach the goal of 100% renewable electricity.

Several testifiers in various discussions about this measure have alluded to California’s solar mandate law which applies to all new single-family and low-rise multifamily projects. HSEO observes that the structure, effectiveness, modifications, staffing requirements, and other relevant aspects of California’s experience could be very informative to this discussion, and recommends that further discussion and

development of this concept be informed by recommendations and lessons learned in California, as well as by Hawaii stakeholder input.

HSEO does not have an estimate of the staffing and funding resources that would be required for HSEO or others to carry out the variance tasks, and revised approval timeframe associated with this bill. HB 860 HD1 provides that fees, if any, imposed and collected to cover the costs of administering the variances are to be deposited into the Energy Security Special Fund (ESSF). The ESSF would require an appropriation ceiling in order for HSEO to expend any monies from such fees.

There are also questions that need to be resolved about the interaction between this requirement and the current requirements of Chapter [196-6.5](#), Hawai'i Revised Statutes, which prohibits the issuance of a building permit to any new home proposed to be built without a solar water heater – including a home that would have a photovoltaic system instead.

HSEO looks forward to further discussion about this topic.

Thank you for the opportunity to testify.



Chamber of Commerce HAWAII

The Voice of Business

**Testimony to the House Committee on Consumer Protection & Commerce
Thursday, February 11, 2021 at 2:00 P.M.
Via Videoconference**

RE: HB 860, HD 1, RELATING TO ROOFTOP SOLAR INSTALLATION

Chair Johanson, Vice Chair Kitagawa, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **opposes** HB 860, HD 1, prohibiting the issuance of building permits for new single-family dwellings that are part of a development of twenty or more dwellings and do not include a rooftop photovoltaic energy generating system, unless a variance is granted.

The Chamber is Hawaii's leading statewide business advocacy organization, representing 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The Chamber appreciates the intent of this measure and the state's goal to encourage the use of more renewable energy. However, the imposition of pricy rooftop energy generating systems as a prerequisite to receiving building permits will only widen the affordability gap of homeownership. Rather, we should begin by encouraging the use of renewal energy in the form of credits and grants by incentivizing developers and new homebuyers.

Additionally, given that "rooftop photovoltaic energy generating system" as proposed in this measure does not only includes photovoltaic but also batteries for energy storage devices, HB 860 will not only exacerbate the cost for each home but may likely force mortgage borrowers to either deposit more downpayment or potentially risk being unqualified to borrow from lenders.

For these reasons, we ask the Committee to defer this measure. Thank you for this opportunity to provide testimony in opposition.



SIERRA CLUB OF HAWAI'I

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

February 11, 2021 2:00 PM

In **SUPPORT** of **HB860 HD1**: Relating to Rooftop Solar Installation

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the committees,

On behalf of our 27,000 members and supporters, the Sierra Club of Hawai'i **strongly supports HB860 HD1**, which requires single-family homes that are a part of a development of twenty or more dwellings to be constructed with rooftop solar if they are not granted a variance beginning on 1/1/2022.

Hawai'i has been a leader in clean energy and climate change policy. Encouraging the adoption of solar photovoltaic for all new home construction helps transform Hawai'i's energy economy and makes progress towards our 100% renewable portfolio standards and 100% carbon neutrality goals.

HB 860 encourages solar on new home construction to provide long-term cost savings to buyers, but would still allow a variance process for when rooftop solar is impractical or cost-prohibitive. If the architect or engineer who signs the variance attests that the home has poor solar resources or solar is cost-prohibitive, and the chief energy officer agrees, then rooftop solar will not be required. We also appreciate the "life-cycle analysis" considering the costs of the system over a twenty-five period, as the average warranty for most rooftop solar energy generation systems installed today is 20-25 years long.

Thank you very much for this opportunity to provide testimony in **support of HB860**.



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 11, 2021, 2:00 P.M.

Video Conference

TESTIMONY IN SUPPORT OF HB 860 HD1, SUGGESTED AMENDMENT

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

Blue Planet Foundation **supports HB 860 HD1**, which requires that solar photovoltaic be a standard feature on new homes in developments with 20 or more houses. This common-sense measure will help us achieve our critical climate goals while keeping the cost of living (mortgage or rent plus monthly utility costs) low.

Residential rooftop solar is a proven tool to help homeowners and renters save money. Over 85,000 homes in Hawai'i have already been retrofitted with rooftop solar at significant savings to their homeowners. Solar is even more cost-effective when it is installed during the construction phase of the home (instead of retrofitting later), and production developers can take advantage of economies of scale in purchasing and installing solar across numerous homes simultaneously (HB 860 targets developments with 20 or more houses). What's more, homeowners can include the cost of the solar installation in their home mortgage.

California—the world's fifth-largest economy—adopted a similar requirement for solar on all new homes which took effect January 2020. The solar requirement was motivated by California's high cost of living as well as the worsening climate crisis.

The California Clean Energy Commission (CEC) conducted a cost-effectiveness study to determine cost and savings implications for Californians purchasing a single-family home under these new building codes. They found that the new solar requirement would add approximately \$8,400 to a new home, equivalent to roughly \$40 extra per month in mortgage payments. However, the CEC also predicted that the energy savings benefits will outweigh the additional monthly mortgage costs. Assuming an average electricity rate of approximately 18 cents per kilowatt-hour (kWh), the state estimated that single-family homeowners will save about \$80 per month on electricity costs (California homebuyers have the option of either paying for solar panels outright, leasing them, or entering a power purchase agreement with developers). These monthly electricity bill savings, combined with paying an extra \$40 each month in mortgage payments for the solar panel system, means new homeowners will come out with \$40 net savings each month. Annually, this comes out to \$500 per year in savings. Should electricity

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prices continue to rise and the cost of solar continue to fall, these savings numbers will improve further.

With Hawai'i's high utility rates, rooftop solar is even more cost-effective (again, particularly when it is built into the home and the mortgage). But it may not work in every case. House Bill 860 allows for a variance from the solar requirement if it doesn't pencil out for the homeowner. If an analysis shows that including solar upfront for new homes is not economically beneficially, the developer can seek a variance from the requirement.

Hawaiian Electric's current plan for achieving Hawai'i's 100% renewable energy goal includes power generation from the rooftop of nearly every home across the islands. We need to plan for that future today. Further, maximizing solar on rooftops reduces our need to develop other lands for renewable energy projects. On-site rooftop solar also provides additional benefits. Rooftop solar reduces the need for utility investments in the power grid, which are paid for by ratepayers. When paired with batteries, as HB 860 envisions, rooftop solar panels can also increase resiliency in neighborhoods, helping homes keep the lights on and communication powered during a blackout.

The State of Hawai'i has committed to a decisive and irreversible transition away from fossil fuels, and a swift transition to a clean energy economy powered by 100% renewable energy. The legislature has passed aggressive carbon reduction goals, including the goal to be net carbon neutral by 2045 (Act 15 of 2018) and strive to achieve the objectives of the Paris Climate Agreement (Act 32 of 2017). Setting these bold targets is important, but alone it is insufficient. Hawai'i needs decisive leadership and bold, implementation-focused policies, such as HB 860, if we hope to achieve our clean energy and climate goals.

Hawai'i faces myriad challenges: a poor economy, high unemployment, a high cost of living, and an increasingly serious climate crisis. By reducing imports of fossil fuel, creating new clean energy jobs, decreasing the monthly cost of living, and reducing carbon emissions, HB 860 is a smart policy response for Hawai'i's future.

SUGGESTED AMENDMENT

Blue Planet appreciates the inclusion of a minimum system size for the solar requirement. We believe that the battery requirement should also specify a minimum capacity. We suggest the following addition on page 6, line 3, of HB 860:

“...shall include an energy storage device, such as a battery, that can store not less than five kilowatt-hours of electricity.”

Thank you for the opportunity to provide testimony.



To: The House Committee on Consumer Protection & Commerce Committee (CPC)
From: Sherry Pollack, 350Hawaii.org
Date: Thursday, February 11, 2021, 2pm

In support of HB860 HD1

Aloha Chair Johanson, Vice Chair Kitigawa, and CPC committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. On behalf of our 6,000 members and supporters, 350Hawaii.org **supports HB860 HD1** and offers an amendment.

Consumers with rooftop solar slash their energy use and enjoy substantial savings on their energy bills. With the highest electrical rates in the country and the impacts of climate change already being felt, every home in Hawaii should be using the sun. This is a common-sense policy. Hawaii is blessed with abundant sun and the move to solar-ready homes is really a no-brainer. Developers who care about our communities should have the long-term interests of new home buyers in mind.

Requiring rooftop solar for single-family dwelling developments of twenty or more is a good start but Hawaii can do better. In 2018, California passed a law requiring rooftop PV on **every new home**. Hawaii should do the same. Extensive studies in California showed that all homeowners would see lower costs if their house had rooftop solar. With Hawaii's climate being even more favorable for solar and electric rates even higher, it is virtually certain the same or better results would happen in Hawaii.

Moreover, rooftop solar is one of the most potent tools Hawaii has for reducing our greenhouse gas emissions. As stated in the preamble of this proposed legislation, available rooftop space for rooftop solar photovoltaics will be an important part of meeting Hawaii's one hundred per cent renewable energy target, as the State is unlikely to meet its renewable energy target with utility—scale resources alone. Limiting this legislation to developments of 20 or more dwellings will significantly reduce the positive impacts intended and critically needed.

Solar-ready homes are the future for Hawaii, a future we must begin now to mitigate the devastating effects of global warming. The UN IPCC report makes clear we have less than 10 years to drastically reduce greenhouse gas emissions to avoid Climate Hell. Requiring all new homes to be solar ready will make a significant difference in our efforts to achieve the reductions necessary. And if our current grid is not capable, we need to change our model. No more excuses.

For these reasons, 350Hawaii recommends this bill be amended to require the installation of rooftop solar energy generation systems on *all* new single-family homes beginning on January 1, 2023, to make Hawaii less dependent on nonrenewable energy sources and increase solar energy use in the State.

Thank you for the opportunity to testify in **support** of this very important bill.

Sherry Pollack
Co-Founder, 350Hawaii.org

February 11, 2021

The Honorable Aaron Ling Johanson, Chair
House Committee on Consumer Protection and Commerce
Via Videoconference

RE: House Bill 860, HD1, Relating to Rooftop Solar Installation

HEARING: Thursday, February 11, 2021, at 2:00 p.m.

Aloha Chair Johanson, Vice Chair Kitagawa, and Members of the Committee,

I am Ken Hiraki, Director of Government Affairs, testifying on behalf of the Hawai'i Association of REALTORS® (“HAR”), the voice of real estate in Hawai'i, and its over 10,000 members. HAR **opposes** House Bill 860, HD1, which prohibits the issuance of building permits beginning on January 1, 2022, for new single-family dwellings that are part of a development of twenty or more dwellings and do not include a rooftop solar energy generation system, unless a variance is granted.

Hawai'i REALTORS® believe that rooftop solar energy generation systems provide great benefits to a homeowner. However, installation of solar energy generation systems can average \$15,000 to \$30,000 or more depending on the single-family home. This expense will be added into the already high cost of housing in Hawai'i, placing homeownership even further out of reach for many of Hawaii's residents.

As such, HAR believes that homeowners should be encouraged to install rooftop solar energy generation systems, but it should not be mandated.

Mahalo for the opportunity to testify.



February 10, 2021

Representative Aaron Ling Johanson, Chair
Representative Lisa Kitagawa, Vice Chair
Members of the House Committee on Consumer
Protection & Commerce
Thirty-First Legislature, Regular Session of 2021

RE: **HB 860, HD1 – RELATING TO ROOFTOP SOLAR INSTALLATION**
Hearing Date: February 11, 2021 at 2:00 p.m.

Aloha Chair Johanson and Members of the Committee on Consumer Protection & Commerce,

Mahalo for the opportunity to submit testimony on behalf of D.R. Horton Hawaii LLC (“D.R. Horton”) in **OPPOSITION** to HB 860, HD1 – RELATING TO ROOFTOP SOLAR INSTALLATION. D.R. Horton is one of Hawaii’s largest home builders and has been providing affordable housing and first-time buyer homes for Hawaii’s families throughout Oahu for over forty years.

D.R. Horton agrees that it is critical for an island state like Hawaii to mitigate the impacts of climate change. In fact, D.R. Horton is a leader in energy efficient, sustainable and smart homes, having committed to an overall sustainability plan for its Ho’opili master planned community in East Kapolei. This plan includes numerous sustainable features such as:

- EV Ready homes with attached garages
- PV Ready homes
- Smart Home System
- Grid Interactive Water Heaters (“GIWH”) - Participation in HECO’s GIWH program
- Solar Attic Fan - Installed in 10% of homes and offered as a buyer’s options
- Energy Efficient Air Conditioning - High efficiency variable speed ductless split AC with minimum 20 SEER rating
- Water Conserving Features - low flow plumbing fixtures, Energy Star appliances, and wireless water submeters at multi-family condo units to track individual unit usage
- Dual Glazed Windows
- LED Lighting
- Ceiling Fans – buyer’s options
- Solatube – Installed in 10% of homes and offered as a buyer’s options
- Refuge Recycling – within multi-family condominium communities
- Recycled Water - Participation in the City’s R1 recycled water system infrastructure

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www.drhorton.com/hawaii

The lack of housing, particularly affordable housing however, is another critical issue facing our State. Mandates such as HB 860, HD1 are particularly concerning because they put homeownership out of reach for many local families, especially those most in need of affordable housing.

Recent cost estimates for a PV system at a Ho’opili single family home ranged from \$28,000 - \$38,000. In mortgage terms, this represents a \$126 to \$171 increase in monthly payments at a 3.5% interest rate. In September of 2019, D.R. Horton analyzed a sampling of 40 homebuyer loan capacities. Of the 40 loans, 28 were conventional loans and 12 were Fair Housing Act (“FHA”) loans. The average debt-to-income ratio of this sampling was 42-44%, anything higher would result in loan disqualification. A \$126 per month increase in monthly mortgage payments under these loans would result in the disqualification of 11 of the 28 conventional loan buyers and 8 of the 12 FHA loan buyers. In short, if new single-family homes at Ho’opili were mandated to install PV systems in September 2019, 48% of buyers seeking a loan would NOT have qualified for a mortgage.

In addition, HB 860, HD1 arbitrarily targets larger scale production home developments (20 homes or more). These are the very projects needed for the State to significantly increase the inventory of housing for local families.

Because companies such as D.R. Horton already have sustainability plans which exceed the benefits offered by HB 860, HD1 and to prevent housing costs from spiraling out of control, we urge you to defer HB 860, HD1 or to amend the bill to require photovoltaic ready infrastructure rather than rooftop solar generation system.

Mahalo for your time and consideration. It is very much appreciated. Should you have any questions, please do not hesitate to contact me at ttonaki@drhorton.com.

Sincerely,



Tracy Tonaki
Senior Vice President



Testimony Before the House Committee on Consumer Protection and Commerce

By David Bissell
President and Chief Executive Officer
Kauai Island Utility Cooperative
4463 Pahee Street, Suite 1, Lihue, Hawaii, 96766-2000

Thursday, February 11, 2021; 2:00 pm
Conference Room #329

House Bill No. 860 HD1 - Relating to Rooftop Solar Installation

To the Honorable Rep. Aaron Ling Johanson, Chair, Rep. Lisa Kitagawa, Vice Chair and Members of the Committee:

Kauai Island Utility Cooperative (KIUC) is a not-for-profit utility providing electrical service to more than 33,000 commercial and residential members. Over the past 10 years, KIUC has made great strides in achieving the state mandate of 100% renewable generation by the year 2045. In 2020, KIUC's energy mix included more than 60% renewable generation, leading the state. Also in 2020, KIUC operated the Kauai electric grid at 100% renewable generation on 280 separate days for a total of 1,497 hours.

KIUC opposes this bill as currently written.

KIUC currently has 110.8 megawatts of solar generating capacity, roughly 30% of which comes from rooftop solar. We are currently saturated with direct-to-grid solar on most sunny days. We do, however, offer two options for members wishing to install new rooftop systems:

- A "right-sized" system that is based on the member's average monthly usage and will not export to the grid.
- An "oversized" system which is designed to export to the grid but is subject to conditions to avoid curtailment.

Many of our "right-sized" systems are smaller than 5 kilowatts and are installed without batteries per the choice of the homeowner. Our concern with this bill is that it would restrict a homeowner's choice of PV system, could force them to purchase a system larger than they need, and would force them to purchase battery storage.

We recommend an amendment as follows:

(f) For the purposes of this section, "rooftop photovoltaic energy generating system" means any identifiable facility, equipment, apparatus, or the like, that utilizes electricity-generating modules mounted on a rooftop, or near the subject property, that converts solar energy to useful electrical energy for heating, cooling, or reducing the use of other types of energy that are dependent upon fossil fuel for the generation of electricity; ~~provided that the system shall have no less than five kilowatts of generating capacity and shall include an energy storage device, such as a battery.~~"

This would preserve the ability of utilities on the various islands to offer choice to their customers.

Thank you for your consideration.



**TESTIMONY TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND
COMMERCE
Hawaii State Capitol, Via Videoconference
February 11, 2021
2:00 PM**

RE: HB 860 HD1, RELATING TO ROOFTOP SOLAR INSTALLATION

Chair Johanson, Vice Chair Kitagawa, and members of the committee:

My name is Beau Nobmann, 2021 President 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 **strongly opposed** to HB 860 HD1, which would, beginning 1/1/2022, prohibit the issuance of building permits for new single-family dwellings that are part of a development of twenty or more dwellings and do not include a rooftop photovoltaic energy generating system, unless a variance is granted.

Previously, the Legislature mandated the installation of solar water heaters on all new single family residential dwellings in Hawaii. Prior to the mandate, the state had provided tax credits to homeowners who purchased a solar water heating system. The utility companies had lists of solar water heater installation companies who were familiar with the tax credit program. This was the incentive to attract existing homeowners to install solar water heating systems. Once the mandate law was passed, the tax credits were eliminated and there was no incentive for existing homeowners to install a solar water heating system.

If the goal is to move the state to be less dependent on fossil fuels, we should learn from past mistakes and use incentives rather than mandates, letting consumers make their own choices.

We strongly oppose HB 860, and appreciate the opportunity to express our views on the matter.



HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 11, 2021, 2:00 p.m.
(*Testimony is 2 pages long*)

TESTIMONY IN SUPPORT OF HB 860, HD1

Aloha Chair Johanson and members of the Committee:

Hawaii PV Coalition (“HPVC”) supports HB 860. This bill advances Hawaii’s ambitious renewable energy goals by requiring new homes to have rooftop solar and batteries. This bill would result in (1) lowered home construction costs, (2) reduced electricity costs and added resilience for new homeowners, and (3) significantly lowered costs circuit and transmission costs to all ratepayers.

This bill is smart policy, and is a potential unicorn “win-win-win” situation. California already requires new homes to be built with rooftop solar. In many situations, ***solar installers pay home developers for the opportunity to install.*** Solar installers see lowered costs of acquiring customers, and are able to pass these savings back to the homebuilders and new homeowners. This can be thousands of dollars per install or, for a larger home construction project, millions of dollars in reduced construction costs. Because it bears repeating, ***this bill can lower the immediate upfront cost of purchasing a home and lower monthly costs thereafter.***

New homeowners will have the option of either (1) purchasing the solar system through a home mortgage, or (2) leasing the system with no additional upfront cost to the customer, and savings demonstrated on their electric bill each month. California determined the average homeowner would see approximately \$40 savings each month on their electric bill, a number that is likely to be greater in Hawaii.

Further, by developing a series of homes together (new subdivisions), the cost of distribution and transmission infrastructure can be significantly reduced. For example, current plans for the Ho’opili subdivision involve millions of dollars of new utility infrastructure (costs borne by all ratepayers) and millions of dollars of local infrastructure (costs borne by new homeowners). The smart approach, instead, is to build rooftop solar and energy efficiency efforts first, and avoid millions of dollars of unnecessary new infrastructure.

Finally, it is necessary to note that Hawaii will not achieve its 100% RPS goal without solar on all roofs. This goal cannot be achieved unless new buildings are designed and built with rooftop solar at the start.

HPVC respectfully asks this Committee to move this measure forward. It makes sense for Hawaii's economy and it is critically needed if Hawaii is going to address the growing climate change crisis.

The Hawaii PV Coalition was formed in 2005 to support the greater use and more rapid diffusion of solar electric applications across the state. Working with business owners, homeowners and local and national stakeholders in the PV industry, the Coalition has been active during the state legislative sessions supporting pro-PV and renewable energy bills and helping inform elected representatives about the benefits of Hawaii-based solar electric applications.



COMMERCIAL REAL ESTATE
DEVELOPMENT ASSOCIATION
HAWAII CHAPTER

February 10, 2021

The Honorable Representative Aaron Johanson, Chair
The Honorable Representative Lisa Kitagawa, Vice Chair
Committee on Consumer Protection and Commerce

RE: **HB 860 HD1- Relating to Rooftop Solar Installation**
Hearing date: Thursday, February 11, 2021 at 2:00PM

Aloha Chair Johanson, and members of the committees,

Mahalo for the opportunity to submit testimony on behalf of NAIOP Hawaii in **OPPOSITION** HB 860, HD1. NAIOP Hawaii is the local 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. NAIOP Hawaii is generally supportive of efforts to promote sustainability. We are, however, concerned with the tremendous burden an additional mandate places on the cost of building homes in Hawaii, especially affordable housing.

HB 860, HD1 prohibits the issuance of building permits for new single-family dwellings that are part of a development of twenty or more dwellings and do not include a rooftop photovoltaic energy generating system unless a variance is granted. Despite the legislature's efforts to address Hawaii's critical affordable housing shortage, it appears that bills requiring additional housing mandates that drastically increase the cost of housing are continuously introduced.

Hawaii's residents and businesses are already among the most heavily taxed in the entire country. There are already significant development mandates which increase the cost of building residential units, which has significantly exacerbated the lack of affordable housing in Hawaii. Requiring rooftop solar systems could easily increase the cost of housing by \$35,000 per unit. At a time when even minor increases to the cost of housing place home prices beyond the affordability measure, such a substantial increase would clearly put homeownership out of reach for most local families. Further, new homeowners will only be able to recoup approximately 14% of the increased cost under the current State tax credit at 35% which is capped at \$5,000. Additionally, the current federal tax credit of 22% will not be available to new homeowners to recoup costs as the credit will expire at the start of 2022. Again, this is drastically contradictory to the legislatures stated efforts to support affordable housing. In addition, there is no indication that the electrical infrastructure could support rooftop solar generation systems on every new home, thus slowing down the pace of homebuilders.

The Honorable Representative Aaron Johanson, Chair
The Honorable Representative Kitagawa, Vice Chair
Committee on Consumer Protection and Commerce
February 10, 2021
Page 2

Moreover, HB 860, HD1 increases approval time for projects with the addition of the variance process. As it stands the pre-development process in Hawaii is already lengthy and creates additional costs that burden housing projects. The legislature should develop ways to shorten and not add to the pre-development process.

In order to keep the cost of housing from spiraling out of control, the Legislature should resist the urge to place additional costs on development. For these reasons, we urge the committee to defer HB 860, HD1. Alternatively, the committees should: 1) develop ways to incentivize the installation of rooftop solar as oppose to a mandate; or 2) reduce the mandate to only require photovoltaic ready infrastructure, which would allow those families who choose to install solar to do so, as opposed to mandating the full rooftop solar systems.

Mahalo for your consideration,

A handwritten signature in black ink, appearing to read "Catherine Camp", with a long, sweeping flourish extending to the right.

Catherine Camp, President
NAIOP Hawaii

HB-860-HD-1

Submitted on: 2/9/2021 11:40:07 PM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Shon	Individual	Support	No

Comments:

I support this effort to increase use of renewable energy.

HB-860-HD-1

Submitted on: 2/10/2021 8:56:04 AM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jacob B Shearer	Individual	Support	No

Comments:

This seems like something that should have happened years ago. There is no reason not to require solar installations on all new housing, and the benefits to homeowners and the environment are a no-brainer.

HB-860-HD-1

Submitted on: 2/10/2021 10:35:54 AM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lee Eisenstein	Individual	Support	No

Comments:

WRITING IN SUPPORT OF HB860 HD1, that requires larger developments to install rooftop solar from the start.

HB-860-HD-1

Submitted on: 2/10/2021 10:58:03 AM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Thomas Brandt	Individual	Support	No

Comments:

Strongly support!

HB-860-HD-1

Submitted on: 2/10/2021 11:47:59 AM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
kevin landers	Individual	Support	No

Comments:

Solar on every roof makes too much sense. Is there really a downside?

Speak

HB-860-HD-1

Submitted on: 2/10/2021 12:29:14 PM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lois Crozer	Individual	Support	No

Comments:

Common sense. Thank you to all of you who introduced this bill.

HB-860-HD-1

Submitted on: 2/10/2021 1:16:38 PM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Danielle Lewis	Individual	Support	No

Comments:

Aloha,

I am a resident, registered voter, and homeowner in Kailua. I am writing to express my strong support of HB860 HD1. Requiring large developments to have rooftop solar seems like an initiative Hawaii should have had in place for years. It is very difficult for many of who live in much older homes or older buildings to retrofit things to be more eco-friendly and energy efficient, but the newer larger developments have more than enough money to do that and there would still be a large beneficial impact on our state's carbon footprint. We need to stop being part of the problem and start being more responsible. So much money, energy, and effort is put into bringing energy sources to Hawaii, when we could be putting all that money and energy into taking care of our keiki and diversifying our economy if we just harnessed the power of the renewable energy sources we have. We owe it to ourselves and to future generations to take this step. Those of us in older homes will do what we can as we can, but the newer homes should be built for the future and not the world of the past.

HB-860-HD-1

Submitted on: 2/10/2021 6:35:48 PM

Testimony for CPC on 2/11/2021 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Parker Johnson	Individual	Support	No

Comments:

Aloha Chair Johanson and members of the Committee,

I support HB 860. This bill advances Hawaii's renewable energy goals by requiring new homes to have rooftop solar and batteries. This bill would result in lowered home construction costs and reduced electricity costs for new homeowners. Other states have already implemented mandates for solar on new homes with success.

New homeowners will have the option of purchasing the solar system or leasing the system with savings on their electric bill each month. Hawaii has the highest electricity costs in the nation and we should be doing everything that we can to help to alleviate this cost.

Hawaii will not achieve its renewable goals without solar on all roofs. This goal cannot be achieved unless new buildings are designed and built with rooftop solar. I am born and raised on this island and I believe that we need to do everything in our power push our state towards renewable options. We have a long way to go and this is an important piece to the puzzle. We need to stop importing oil for our electricity needs. This is inefficient and has been going on for far too long.

Mahalo for the opportunity to testify,

Parker Johnson