



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
KA 'OIHANA O KA LOIO KUHINA
THIRTY-SECOND LEGISLATURE, 2024**

ON THE FOLLOWING MEASURE:
H.B. NO. 2754, RELATING TO AGRICULTURE.

BEFORE THE:
HOUSE COMMITTEE ON AGRICULTURE AND FOOD SYSTEMS

DATE: Wednesday, February 14, 2024 **TIME:** 9:15 a.m.

LOCATION: State Capitol, Room 325 and Videoconference

TESTIFIER(S): Anne E. Lopez, Attorney General, or
Candace J. Park, Deputy Attorney General

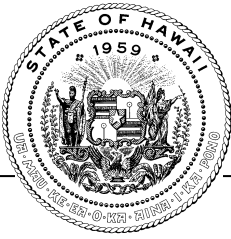
Chair Gates and Members of the Committee:

The Department of the Attorney General provides the following comments.

This bill: (1) establishes a plant-based building materials working group to study how best to grow plants for development of plant-based building materials in Hawai'i and provide green agricultural jobs while sequestering carbon and other greenhouse gases to help achieve the State's climate target; (2) requires the Dean and Director of the University of Hawai'i at Mānoa College of Tropical Agriculture and Human Resources, or designee, to serve as Chairperson of this working group; and (3) requires the Director of the University of Hawai'i at Hilo College of Agriculture, Forestry, and Natural Resource Management, or designee, to serve as a member, along with other designated or invited members.

Article X, section 6, of the Hawai'i Constitution gives the Board of Regents of the University of Hawai'i "exclusive jurisdiction over the internal structure, management, and operation of the university." Section 6 further provides: "This section shall not limit the power of the legislature to enact laws of statewide concern. The legislature shall have the exclusive jurisdiction to identify laws of statewide concern." If the Committee decides to pass this bill, we recommend an amendment that adds a statement identifying this bill as a law of statewide concern.

Thank you for the opportunity to provide these comments.



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
INTERIM DIRECTOR

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Statement of
MARY ALICE EVANS, Interim Director

before the
HOUSE COMMITTEE ON AGRICULTURE & FOOD SYSTEMS

Wednesday, February 14, 2024

9:15 AM

State Capitol, Conference Room 325

in consideration of
HOUSE BILL 2754
RELATING TO AGRICULTURE

Chair Gates, Vice Chair Kahaloa, and Members of the Committee on Agriculture & Food Systems:

The Office of Planning and Sustainable Development (OPSD) **supports** H.B. 2754, which Establishes a Plant-Based Building Materials Working Group to report on how best to grow plants and develop plant-based building materials in Hawai'i and provide economic development and green jobs while sequestering greenhouse gases to help achieve the State's climate target.

OPSD recommends one friendly amendment to add the State Sustainability Coordinator to this plant-based working group.

Plant-based building materials utilize organic materials derived from plants in the construction process, offering sustainable alternatives to traditional building materials. Many plant-based materials, such as timber, bamboo, and straw, sequester carbon dioxide during growth. By incorporating these materials into urban construction, cities can effectively store carbon and mitigate greenhouse gas emissions. Certain plant-based materials, like permeable pavements made from porous plant-derived aggregates, help manage stormwater runoff by allowing water infiltration, reducing flooding risks, and improving urban water resilience.

OPSD supports this measure and considers that this proposed Plant-Based Building Materials Working Group can help promote Hawai'i's sustainable urban development and enhancing climate resilience.

Thank you for the opportunity to testify on this measure.

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson, Board of Agriculture

DEXTER KISHIDA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE
KA 'OIHANA MAHI'AI
1428 South King Street
Honolulu, Hawai'i 96814-2512
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**TESTIMONY OF SHARON HURD
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEES ON AGRICULTURE AND ENVIRONMENT
AND ENERGY, ECONOMIC DEVELOPMENT AND TOURISM**

**WEDNESDAY, FEBRUARY 14, 2024
9:15 AM
CONFERENCE ROOM 325 AND VIDEOCONFERENCE**

**HOUSE BILL 2754
RELATING TO AGRICULTURE**

Chair Gates, Vice Chairs Kahaloa, and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 2754. This bill establishes a Plant-Based Building Materials Working Group (PBBM) to report on how best to grow plants and develop plant-based building materials in Hawaii and provide economic development and green jobs while sequestering greenhouse gases to help achieve the State's climate target. The Department of Agriculture (Department) supports this measure with comments.

Plant-based building materials, grown in Hawaii, would support replacing building materials that are imported. Import replacement reduces the pathways for the introduction of invasive pests that include building materials. The caution with importing plants for plant-based building materials is the need to check with the Department for prior approvals to determine if the plant material is harmful to the state. Including Department Plant Quarantine Staff in the PBBM Working Group and would be important to add or include in the 10-member working group. The measure allows for additional members with appropriate specialized expertise, for which consideration to include an industrial hemp farmer would be recommended.



The Department requests a position in AGR192 – Administration to serve as a Sustainability Advisor whose position description would include, but not be limited to advising on matters of food security, climate change, greenhouse gas sequestration, and green agriculture jobs. The recommendation would be an SR-24 position, salary of \$71,000 a year. This measure will move Hawaii to consider green alternatives for construction materials and we support this measure so long as it does not impact the budget priorities set forth in the Executive Budget Submittal.

Thank you for the opportunity to testify on this measure.

Citizens' Climate Lobby Hawaii
hi.ccl.lobby@gmail.com
cclhawaii.org



February 12, 2024

SUPPORT FOR HB2754 – Plant-Based Building Materials Working Group

Dear Chair Gates, Vice Chair Kahaloa, and Members of the Committee.

Citizens' Climate Lobby (CCL) Hawaii supports HB2754, which Establishes a Plant-Based Building Materials Working Group to report on how best to grow plants and develop plant-based building materials in Hawaii and provide economic development and green jobs while sequestering greenhouse gases to help achieve the State's climate target.

CCL Hawaii comprises over 1000 members across Hawaii. We advocate for effective, efficient, and fair climate legislation. We support HB2754.

Throughout Hawaii there are thousands of acres of land previously in cultivation of sugar and pineapple, much of it abandoned to wildfire prone invasive plants. These lands could support cultivation of plant-based building materials and fibers while growing green agricultural jobs. The compelling opportunity is to grow local crops that need not be imported at additional expense and creating jobs. Local crops such as clumping bamboo, hemp fiber, and blue-green algae would both sequester carbon and water, while holding Hawaii's precious soil. These benefits are worthy of study by a Plant-Based Building Materials Working Group.

Please support HB2754.

Thank you for this opportunity to testify.

Respectfully,
CCL Hawai`i

Citizens' Climate Lobby (CCL) is a nonprofit, nonpartisan, grassroots advocacy organization focused on national policies to address climate change solutions. CCL Hawaii's 1000+ members are part of a 180,000+ global organization. For more information, visit citizensclimatelobby.org.



To: The Honorable Chair Cedric Gates, the Honorable Vice Chair Kristin Kahaloa, and Members of the Committee on Agriculture and Food Systems.

From: Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

Re: **Hearing HB2754 RELATING TO AGRICULTURE**

Hearing: Wednesday February 14, 2024, 9:15 a.m.

Aloha Chair Gates, Vice Chair Kahaloa, and Members of the Committee on Agriculture and Food Systems:

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and ocean. HIROC is deeply concerned about climate change as it impacts the marine environment.

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate. Climate Protectors Hawai'i is interested in options to reduce carbon emissions and to sequester carbon.

The Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i STRONGLY SUPPORT HB2754!

Building construction has a huge impact on the climate. Production of building materials such as steel and cement involves some of the largest carbon emissions. Cutting mature trees for buildings involves a very large loss of carbon sequestration. **We need to decarbonize our building construction!**

Plants can provide structural building alternatives that are much less harmful for the climate.

For example, there are types of **clumping bamboo** that can grow very rapidly with sufficient water. They can be processed into wood building materials that are stronger, more flexible, and lighter than timber or steel. They can be treated so they are more fire and termite-resistant than wood. They sequester ten times as much carbon as trees!

"Hempcrete" developed from industrial hemp can substitute for building blocks.

"Biocements" produced from cyanobacteria (blue-green algae or "pond scum") can substitute for Portland cement.

Hawaii's year-round growing season and areas with ample water make it ideal for development of plant-based building materials.

This may be a great opportunity for Hawai'i to lead in decarbonizing buildings while developing plant-based local industries!

Plant-based building materials have great potential to bring "green" jobs to Hawai'i!

This bill would establish a plant-based building materials working group to study how best to grow plants for development of plant-based building materials in Hawai'i and provide green agricultural jobs while sequestering carbon and other greenhouse gases to help achieve the States climate target.

The Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i **STRONGLY SUPPORT** this bill! Please pass it!

Mahalo!

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

HB-2754

Submitted on: 2/13/2024 7:10:53 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Brian Miyamoto	Hawaii Farm Bureau	Support	Written Testimony Only

Comments:

The Hawaii Farm Bureau requests that the President of the Hawaii Farm Bureau be included as a member of the Working Group.

**Building Decarbonization Task Force
Hawai'i Environmental Change Agents**

HawaiiChangeAgents@gmail.com
hawaiichangeagents.org

February 12, 2024

SUPPORT FOR HB2754 – Plant-Based Building Materials Working Group

Aloha Chair Gates, Vice Chair Kahaloa, and Members of the Committee:

The Building Decarbonization Task Force of the Hawai'i Environmental Change Agents supports HB2754, which “Establishes a Plant-Based Building Materials Working Group to report on how best to grow plants and develop plant-based building materials in Hawai'i and provide economic development and green jobs while sequestering greenhouse gases to help achieve the State's climate target.”

Hawai'i Environmental Change Agents (HECA) consists of ten task forces; one of which is the Building Decarbonization Task Force. This task force supports **HB2754** as it is an easy and a productive first step for the State to take to do the following:

- Diversify its economy;
- Lower construction costs; and
- Reduce its greenhouse gas emissions.

By taking advantage of its year-round growing season and ample rain in many areas, Hawai'i could experience many financial benefits by developing a local plant-based building materials such as bamboo and hempcrete. Doing so would provide jobs for many residents and lower home ownership costs while also helping Hawai'i meets its greenhouse gas emission reduction goals. **HB2754** would establish a working group to study these opportunities.

Thank you for this opportunity to testify.

Please support HB2754.

Respectfully,
Building Decarbonization Task Force of HECA



Environmental Caucus of
The Democratic Party of Hawai'i

Agriculture & Food Security Committee Energy & Climate Action Committee

Wednesday, February 14, 2024, 9:15 am

House Committee on Agriculture and Food Systems

HOUSE BILL 2754 – RELATING TO AGRICULTURE

Position: Support

Me ke Aloha, Chair Gates, Vice-Chair Kahaloa, and members of the House Committee on Agriculture and Food Systems:

HB2754 establishes a Plant-Based Building Materials Working Group to explore and develop plant-based building materials in Hawai'i.

Both the Agriculture and Food Security Committee and the Energy and Climate Action Committee find that this unusual-sounding bill is far more thoughtful and well-purposed than many of the ideas we see surface at the Legislature, having the potential to transform sectors of the construction industry while sequestering greenhouse gases to help achieve the State's climate target. In addition, it builds on Hawaiian tradition of enhancing the landscape (as opposed to the western style of exploitation) while advancing technology. It also enhances economic security by providing local-based alternatives to imports, thus also saving locally-earned dollars and building local revenues.

Our committees have worked with strategic partners across the community to generate ideas for improving economic security in the face of inevitable supply chain disruptions, while supporting local innovators and entrepreneurs in the time-honored innovative Hawaiian style. Moreover, the proposals in this legislation offer to heal depredations on the landscape and nearshore waters that have suffered under plantation agriculture, enhancing sequestration of greenhouse gases, replacing greenhouse gas-producing industry, and enhancing locally-based employment and education. This amounts to “green jobs” suited to our climate, our community, and our local expertise. It offers ways to diversify the economy using familiar materials and knowledge.

We welcome a working group to explore these possibilities and lend convincing persuasion.

Mahalo for the opportunity to address this matter.

/s/ Charley Ice Acting Chair, Agriculture and Food Security Committee, and
Chair, Energy and Climate Action Committee
Environmental Caucus of the Democratic Party



Hawai'i Forest Industry Association
7192 Kalaniana'ole Hwy
Suite A-143A, #249
Honolulu, HI 96825
Phone: 808/933/9411
Email: hfia@hawaiiiforest.org



Date: 02/13/24

TO: AGR Chair Gates, Vice Chair Kahaloe and AGR Committee Members Cochran, Lowen, Perruso, Woodson Ward

FROM: the Hawai'i Forest Industry Association (HFIA)

SUBJECT: Testimony in Support for HB2754 Relating to Agriculture

Dear Chair Gates and Committee Members,

The Directors and members of the Hawai'i Forest Industry Association (HFIA), are supportive of HB2754 and the creation of a plant based building materials working group, however, we strongly encourage the inclusion of timber/wood products.

On page two, lines 1 and 2 of the measure, timber seems to be omitted from the portfolio of possible plant-based materials due to the emission of "large amounts of greenhouse gasses", however not only does timber production does not always have net positive emissions, and it can also offer a number of benefits.

Sustainable Forestry involves balancing the needs of the forest, ecosystem, culture, and our community by supporting a thriving forest products industry that sustainably uses the forest resources and provides significant numbers of family wage jobs. Sustainable forestry includes managing existing forests and outplanting enough trees to offset carbon emitted during the harvesting and transport process, via carbon sequestration. Additionally, harvesting and utilizing trees that are near the end of their life cycle prevents the greenhouse gasses those trees were sequestering from entering our atmosphere during the process of decomposition. When we harvest trees and turn the wood into finished wood products, those products continue to store the greenhouse gasses for years to come.

Furthermore, the inclusion of timber in this exploration of plant-based building materials would open up the opportunity for Hawaii to experience the many additional benefits of sustainable forestry: increased economic development opportunities; job creation; reduced reliance on imported materials; improved watershed health; cleaner drinking water; purified air to breathe; better access to our forests for Native Hawaiian cultural practices; and increased opportunities for recreation, such as hiking & bird watching

The HFIA recognizes and supports the value in exploring and innovating with plant based building materials but encourages you to support HB2754 *with* amendments to include timber.

Mahalo for your time and consideration,

Guy Cellier, President
Hawai'i Forest Industry Association

HFIA's mission is to promote healthy and productive forests and a sustainable forest industry through management, education, planning, information exchange, and advocacy. HFIA has over 130 members including woodworkers, landowners, sawyers, foundations, foresters, growers, educators, environmentalists, architects, millers, ranchers, and others interested in HFIA's mission and goals.

HFIA Board of Directors

Officers: President Guy Cellier, Vice President Irene Sprecher, Secretary Taylor Coons, Treasurer Wade Lee
Directors: Jeremy Campbell, Aaron Hammer, Nicholas Koch, Michael Sowards, Aileen Yeh

HB-2754

Submitted on: 2/12/2024 5:01:34 PM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jacqueline S. Ambrose	Individual	Support	Written Testimony Only

Comments:

Aloha,

RELATING TO AGRICULTURE.

Establishes a Plant-Based Building Materials Working Group to report on how best to grow plants and develop plant-based building materials in Hawaii and provide economic development and green jobs while sequestering greenhouse gases to help achieve the State's climate target.

HB-2754

Submitted on: 2/12/2024 10:33:07 PM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

Comments:

Dear Chair Gates, Vice Chair Kahaloa, and members of the Committee On Agriculture & Food Systems

In strong support of HB2754.

Thank you for hearing HB2754 which will establish a Plant-Based Building Materials Working Group to report on how best to grow plants and develop plant-based building materials in Hawaii.

Throughout Hawaii there are thousands of acres of land previously in cultivation of sugar and pineapple. These lands could support cultivation of plant-based building materials and fibers while growing green agricultural jobs.

Based on actual experience in the Philippines and Florida, it has been estimated that if just one fourth of Hawaii's land previously devoted to sugar and pineapple were now to be put to the cultivation of clumping, non-invasive bamboo that fully 90% of Hawaii's annual carbon emissions would be naturally sequestered by this amazing plant. And harvesting does not kill bamboo – it begins regrowth immediately after the style of lawn grass.

Please refer to <https://rizomebamboo.com/>

I respectfully urge your support of HB2754.

Sincerely, Ron Reilly
Volcano Village, Hawaii

HB-2754

Submitted on: 2/13/2024 5:27:40 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Noel Morin	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Asuega, Vice Chair Kahaloa, and Members of the Committees,

I support HB2754, which will allow us to determine how to leverage our natural resources to generate locally produced building materials.

This has the potential to build up our agriculture industry, reduce our dependence on imported materials, improve our local economies, and contribute to climate action. [Bamboo](#) and hemp are examples of materials that can be grown sustainably across our state and contribute to essential building materials.

Thank you for this opportunity to testify.

Noel Morin

Climate, Sustainability, and Resilience Advocate

Hilo, Hawai'i

HB-2754

Submitted on: 2/13/2024 7:47:40 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Stephanie Skow	Individual	Support	Written Testimony Only

Comments:

Throughout Hawaii there are thousands of acres of land previously used for cultivation of sugar and pineapple crops. These lands could support cultivation of plant-based building materials and fibers while growing green agricultural jobs. The opportunity to grow local crops that need not be imported at additional expense is great. Local crops, such as clumping bamboo, hemp fiber, and blue-green algae would sequester carbon and water, while productively holding Hawaii's precious soil.

Thank you for your consideration! And Happy Valentine's Day! :)

HB-2754

Submitted on: 2/13/2024 8:55:52 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Andrea Nandoskar	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloe, and Members of the Committee on Agriculture and Food Systems,

STRONGLY SUPPORT HB2754

Reuse and remediation of land previously in cultivation of sugar and pineapple cultivation to grow plant-based building materials and fibers while **growing green agricultural jobs** is a positive model on multiple levels. The opportunity to grow local crops that need not be imported at additional expense is great. In addition, crops such as clumping bamboo, hemp fiber, and blue-green algae would sequester carbon and water, while productively holding Hawaii's precious soil.

Creating a Plant-Based Building Materials Working Group is an important first step forward to further study and develop a plan to harness these crops as local climate solutions that will reap positive benefits for the people of Hawaii, the aina and the wai.

Mahalo for your consideration!

HB-2754

Submitted on: 2/13/2024 9:16:20 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
katherine skow	Individual	Support	Written Testimony Only

Comments:

Throughout Hawaii there are thousands of acres of land previously in cultivation of sugar and pineapple. These lands could support cultivation of plant-based building materials and fibers while growing green agricultural jobs. The opportunity to grow local crops that need not be imported at additional expense is great. Local crops, such as clumping bamboo, hemp fiber, and blue-green algae would sequester carbon and water, while productively holding Hawaii's precious soil, in addition to contributing to the islands' self sufficiency.

These are activities worthy of study by a Plant-Based Building Materials Working Group.

LATE

HB-2754

Submitted on: 2/13/2024 10:52:14 AM

Testimony for AGR on 2/14/2024 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Christina Laney Mitre	Individual	Support	Written Testimony Only

Comments:

Throughout Hawaii there are thousands of acres of land previously in cultivation of sugar and pineapple. These lands could support cultivation of plant-based building materials and fibers while growing green agricultural jobs. The opportunity to grow local crops that need not be imported at additional expense is great. Local crops, such as clumping bamboo, hemp fiber, and blue-green algae would sequester carbon and water, while productively holding Hawaii's precious soil.

These are activities worthy of study by a Plant-Based Building Materials Working Group.