



# HAWAII'S CARBON DRAWDOWN OPPORTUNITY

2.2.2022



# Hawaii Fundamentals

According to DLNR, Hawaii's Priority Issues are:

- Issue 1: Water Quality & Quantity Issue
- Issue 2: Forest Health: Invasive Species, Insects & Disease
- Issue 3: Wildfire Issue
- Issue 4: Urban & Community Forestry Issue
- Issue 5: Climate Change/Sea Level Rise Issue
- Issue 6: Conservation of Native Biodiversity
- Issue 7: Hunting, Nature-Based Recreation and Tourism
- Issue 8: Forest Products & Carbon Sequestration
- Issue 9: Multi-State Issues

# Bamboo can help address nearly all of Hawaii's Fundamentals

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# Bamboo Fundamentals

Giant timber bamboo is the fastest natural way to get CO<sub>2</sub> out of the atmosphere

Giant timber bamboo is the fastest growing plant on the planet

As such giant timber bamboo is the fastest natural drawdown strategy

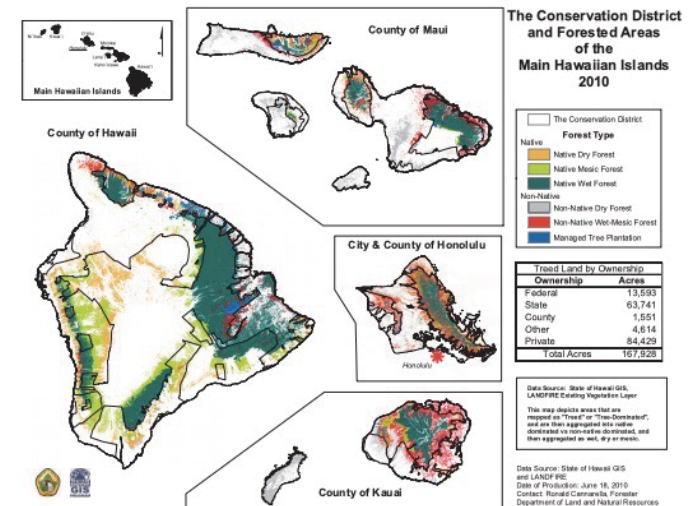
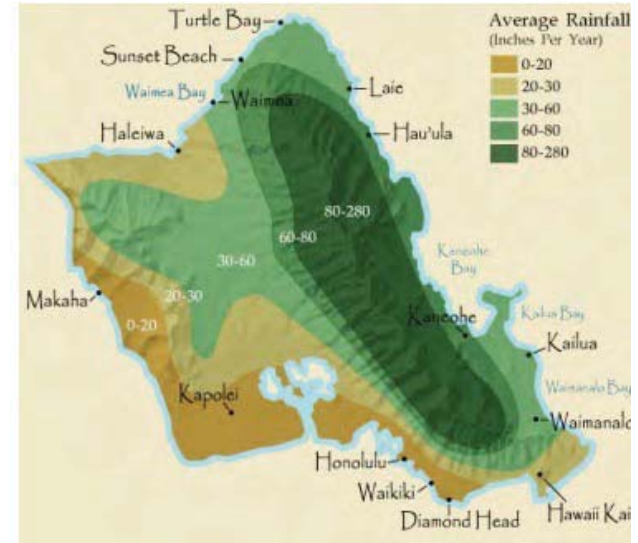
Giant tropical timber bamboos are clumping bamboos and unlike running bamboos are noninvasive and can be part of a diverse ecosystem

Drought resistant and fire-resistant perennial

60 to 100-year life span of bamboo plants

# Hawaii Bamboo Fundamentals

- Hawaii has the right climate and terrain for world's largest bamboo species
- Hawaii has deforested land
- Bamboo Living is local, and has been at the leading edge of Hawaii bamboo construction for 26 years
- Bamboo Living's affiliated company, Rizome has the technical and managerial expertise, experience and past performance (in Philippines) to stand up a large-scale bamboo economy in Hawaii



# BAMBOO LIVING

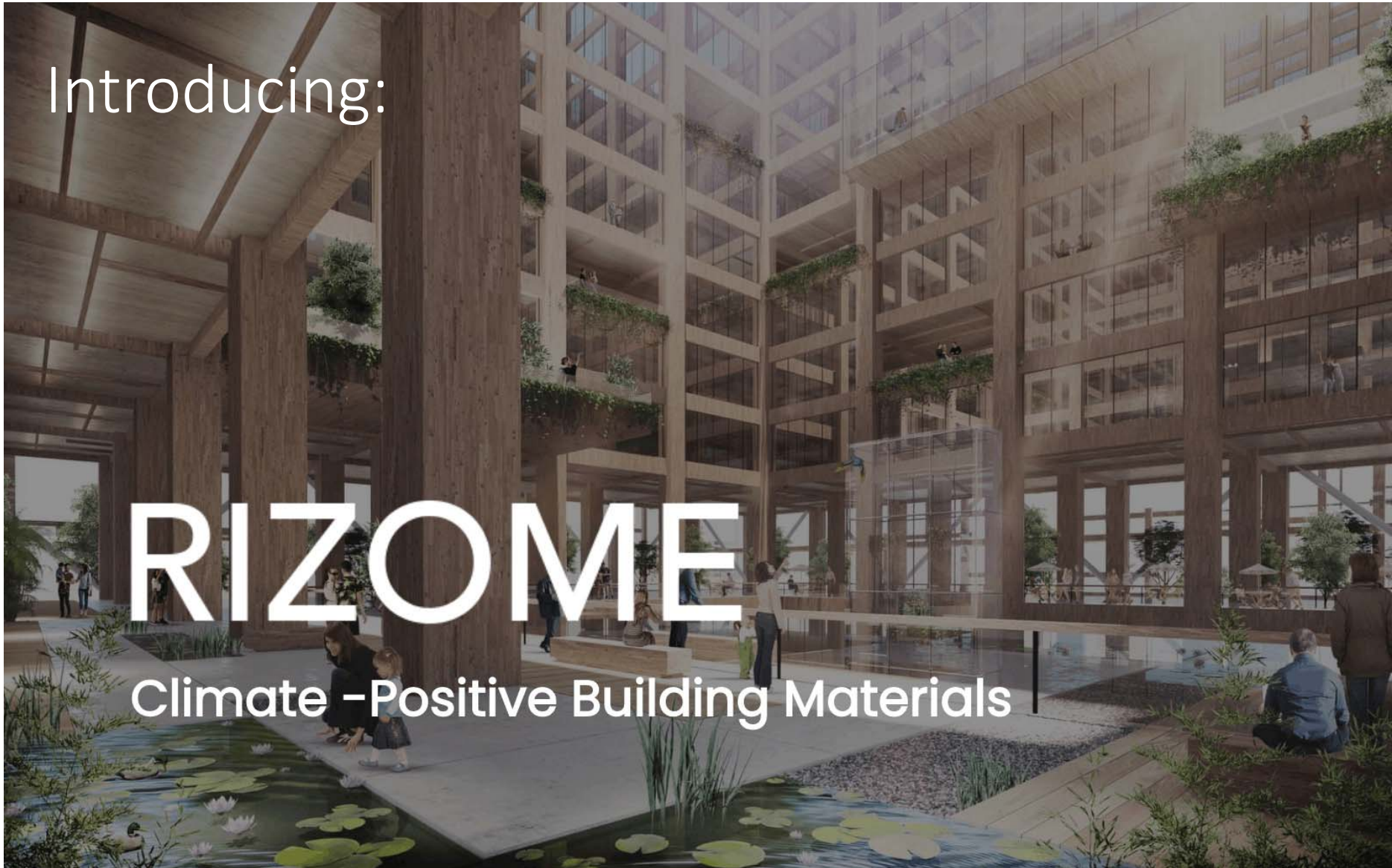
HUNDREDS OF BAMBOO HOMES THROUGHOUT HAWAII  
HAWAII BASED FOR OVER 25 YEARS



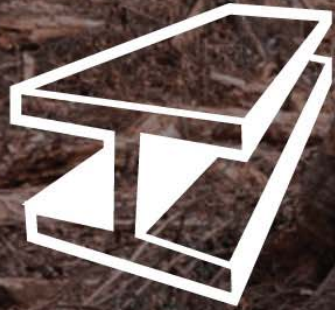
Introducing:

# RIZOME

Climate - Positive Building Materials



# Global Construction is an Ecological Disaster



**Concrete and Steel**

**17% of Global CO2 Emissions**



**Wood**

**18 million Acres/Year Deforestation**



# Technically Superior. Climate-Positive. Same Price (soon).



## Climate-Positive

Carbon Drawdown Construction



## Strength

2.5X Strength/Weight vs Steel



## Regenerative

12x Less Land than Wood



## Fire-Resistant


Class A Fire Rating

# \$1 Trillion

## Total Addressable Market



**As slat price decreases we access a larger total addressable market**



*Bamboo is the Fastest  
Carbon Sequestration  
Technology on Earth*

10X Faster than Trees

# Carbon Offset Credits



## 1. Plant

10X Faster Drawdown  
vs Trees



## 2. Track

RFID + Blockchain  
Tracking



## 3. Sell

Global B2B  
Marketplace

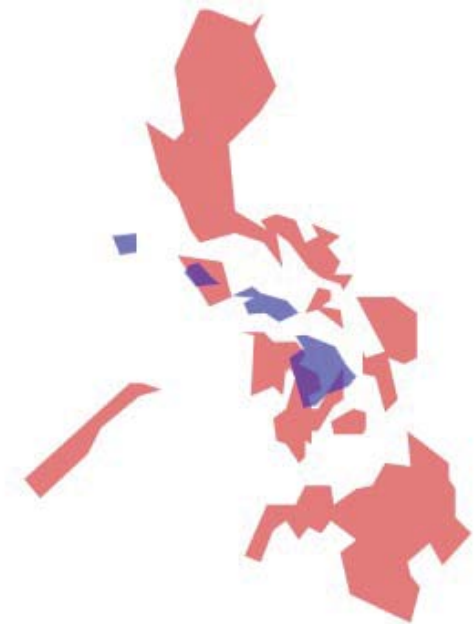
**342% YoY Market Growth**

# Rizome not only CAN do it, we HAVE done it

## **What would constitute a comprehensive bamboo economy in Hawaii?**

1. Nurseries
2. Planters
3. Carbon value chain processes
4. Harvesters
5. Bamboo slat processors
6. Engineered bamboo products
7. Synergistic material optimization products and markets

*Comparing Hawaii landmass to Mindanao, Philippines*





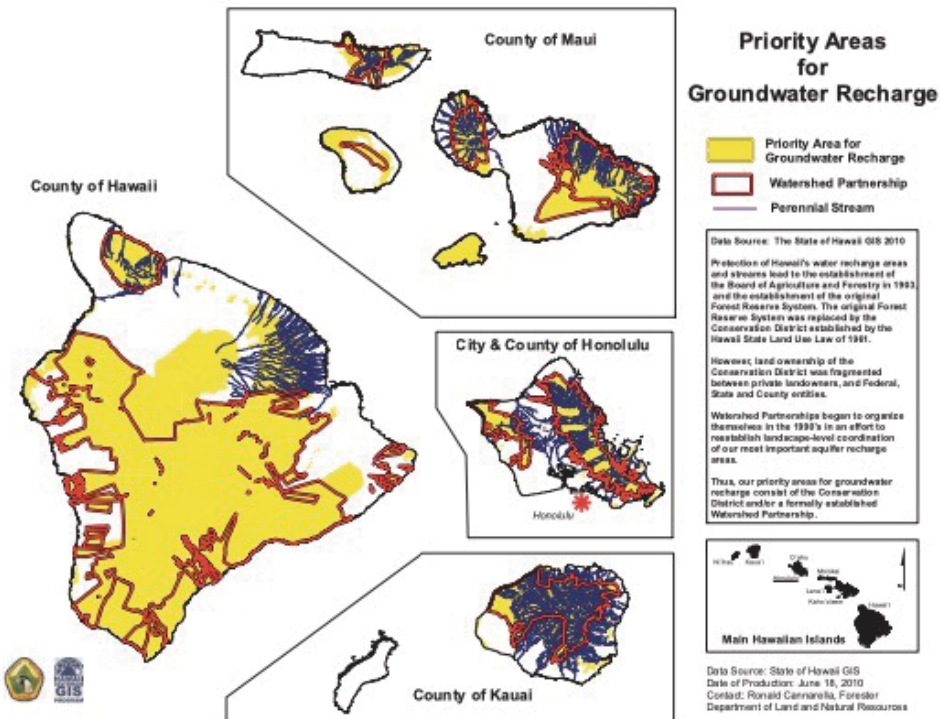




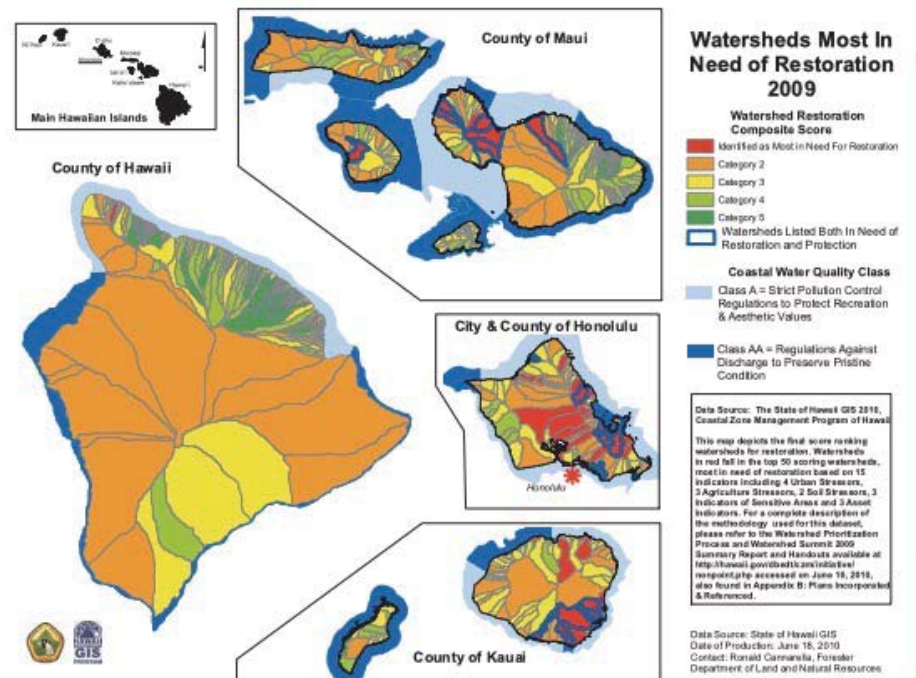




# Hawaii Bamboo Economy – Strategic Considerations



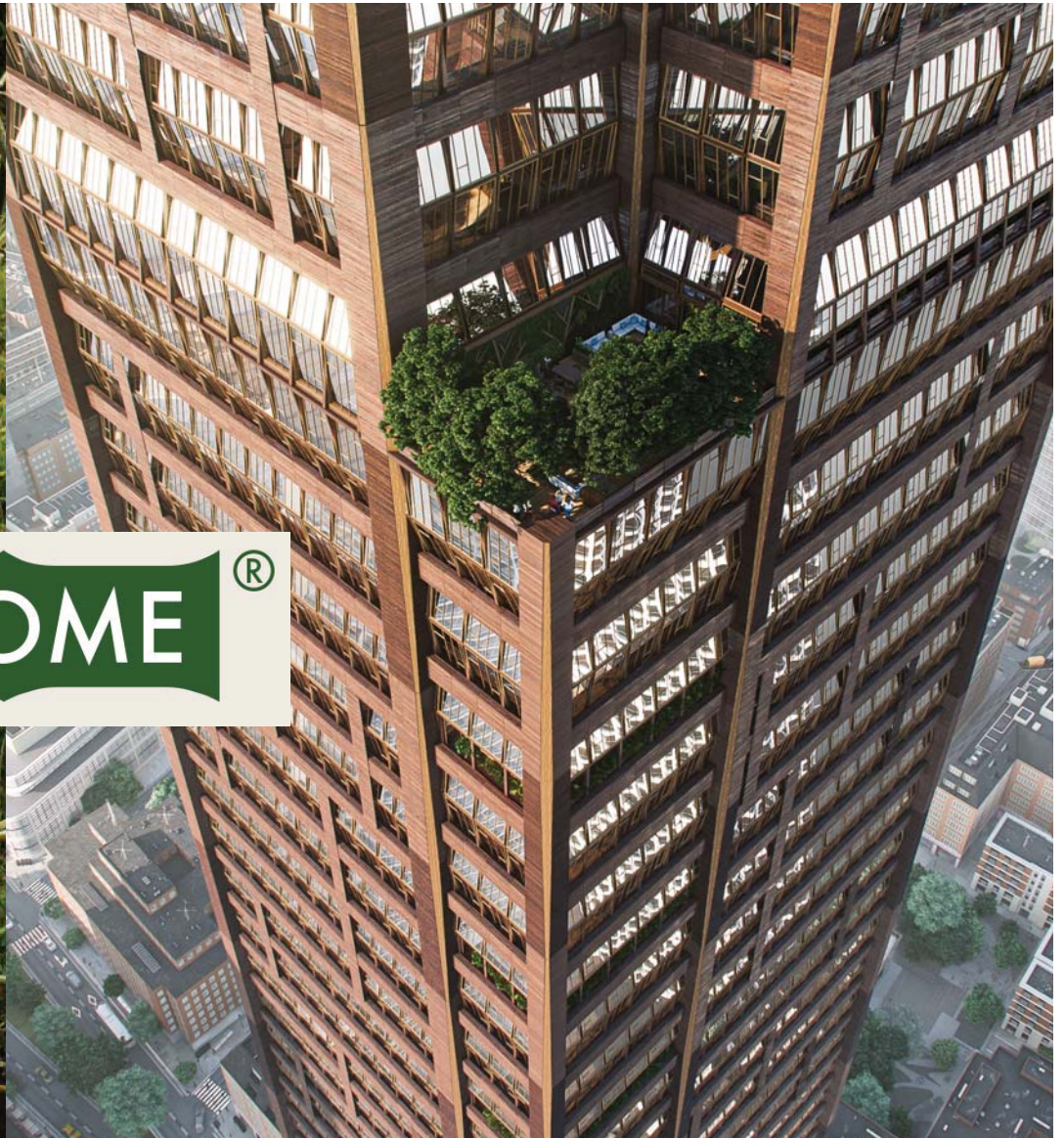
Map 1.2 Watersheds Most In Need of Restoration 2009



# How does a 10-year, 25,000 acres program translate into Carbon Removal?

- Each bamboo species has distinct carbon removal profile
- Dendrocalamus Asper carbon removal, 10 years, 200 tCO<sub>2</sub>e per ACRE = 5,000,000 t CO<sub>2</sub>e
- Dendrocalamus Giganteus  
13-year-old clump in Kapaau, Hawaii Island (shown)





**RIZOME**®

- [DAVID@RIZOMBAMBOO.COM](mailto:DAVID@RIZOMBAMBOO.COM)
- [WWW.RIZOMBAMBOO.COM](http://WWW.RIZOMBAMBOO.COM)

## CARE Committee

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**From:** Axel I. Beers  
**Sent:** Wednesday, February 2, 2022 8:57 AM  
**To:** CARE Committee  
**Subject:** CARE-11 Presentation to Feb. 2 CARE Committee  
**Attachments:** Hawaii's Carbon Drawdown Opportunity 220202.pdf

Aloha,

Please see the attached presentation from David Sands.

Thank you,  
Axel



Axel Beers, Executive Assistant  
**Office of Councilmember Kelly T. King**  
South Maui Residency  
Office: 808.270.8018  
200 South High Street, 8<sup>th</sup> Floor  
Wailuku, HI 96793  
<http://mauicounty.us/>

*Now is the time to provide input to update the South Maui Community Plan! <https://southmaui.wearemaui.org/get-involved/>*

**we are**  
SOUTH MAUI