



Carbon Drawdown Solutions Presents
The many benefits of bamboo

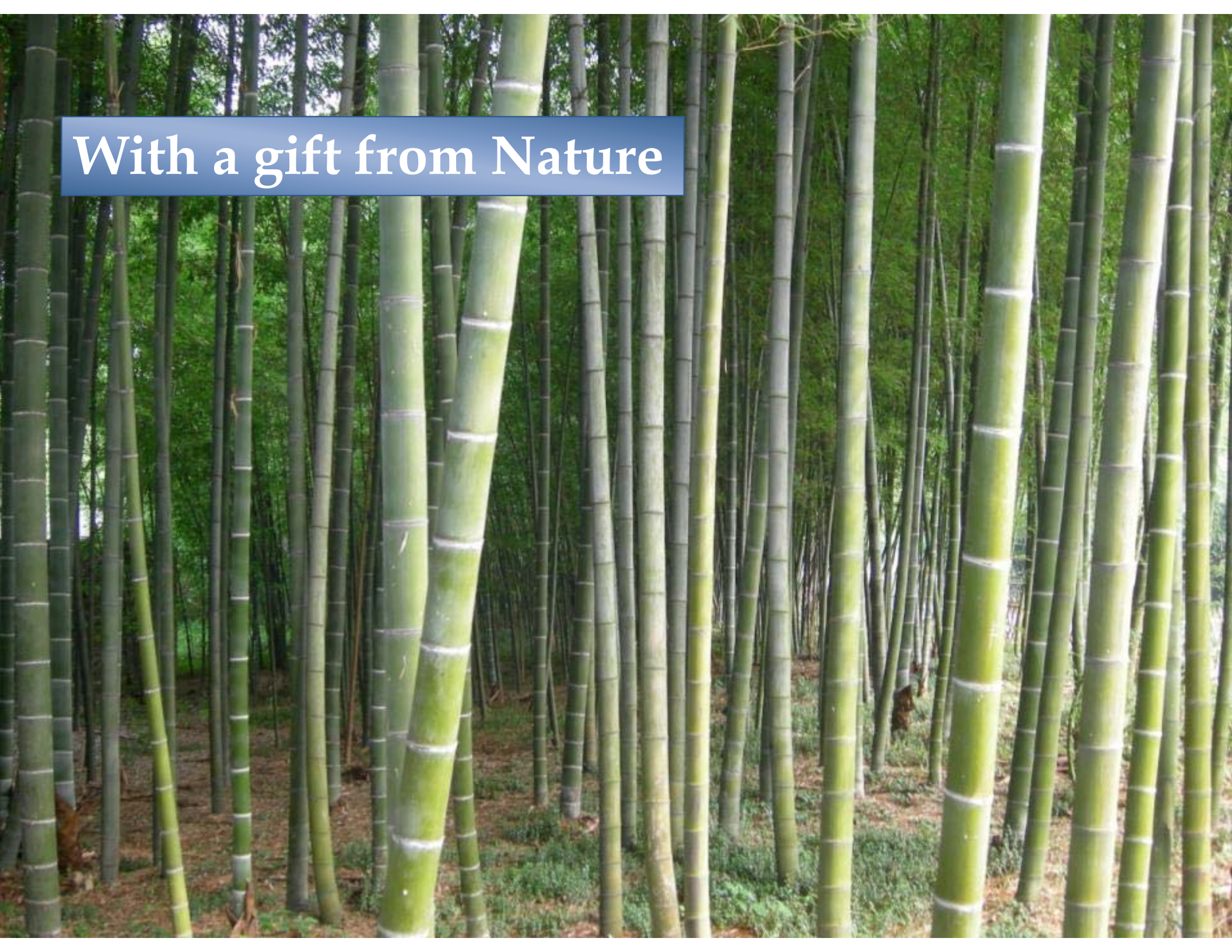
Prepare to



Fall in love



With a gift from Nature



A low-angle, upward-looking photograph of a dense bamboo forest. The bamboo stalks are tall and slender, reaching towards the top of the frame. The leaves are a vibrant green, and sunlight filters through the canopy, creating a bright, airy atmosphere. The overall scene is lush and natural.

And a climate change hero



It regreens the earth



The plant matures in 5 years

20% of the plant is harvested every year thereafter



It controls erosion along rivers & on steep hills



It is a
pioneer plant

Photo from Maui

Which means it will turn poor soil



Into rich soil – see earthworm castings





These photos are from Vietnam only 4 years after planting!



It establishes w/o herbicides —photo from Maui



By out growing its
neighbors photo from Maui

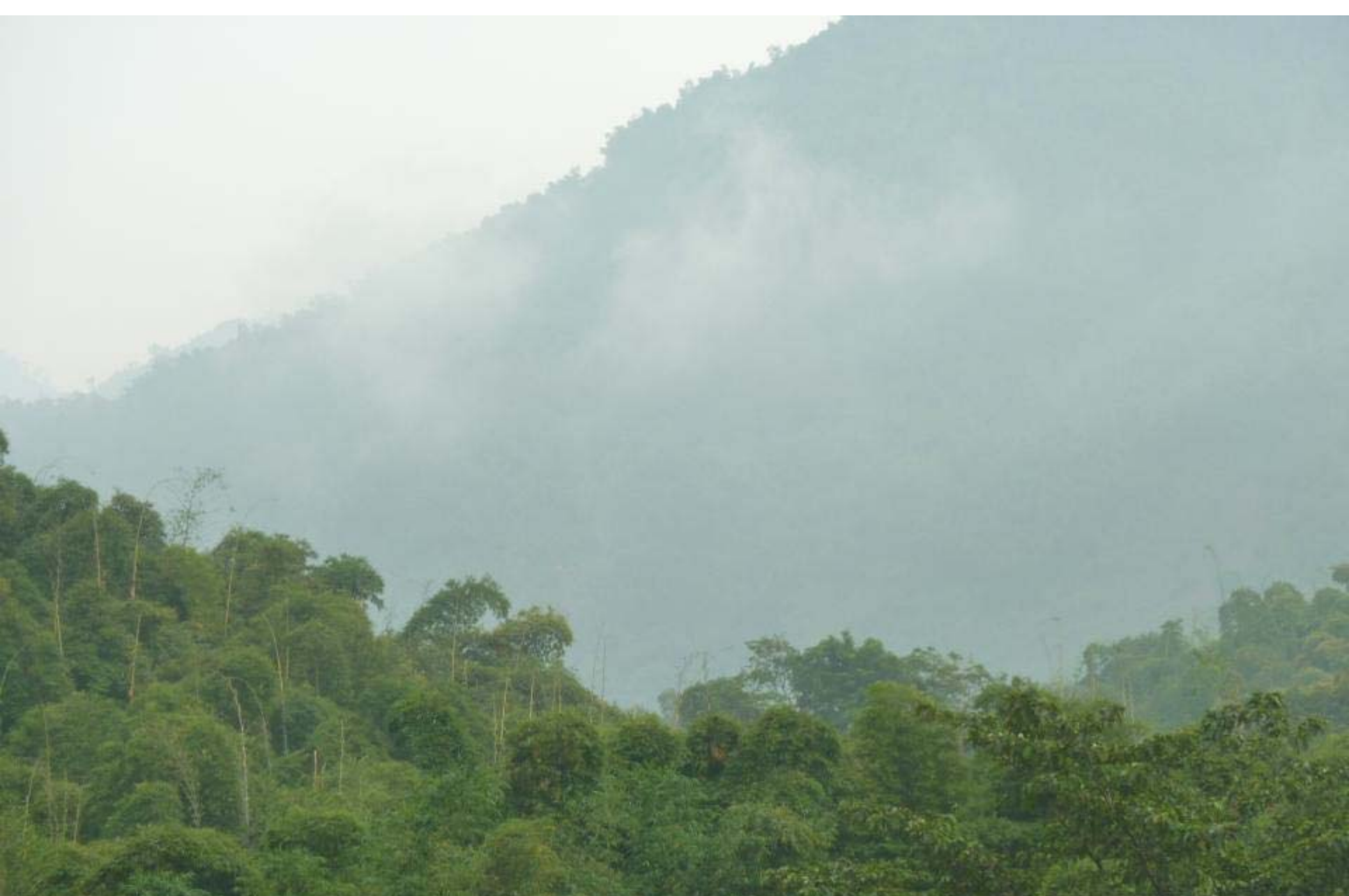


5 years later - photo from Maui

A photograph of a dense bamboo forest. The bamboo stalks are tall, green, and segmented, with some showing signs of being cut or broken. The ground is covered in a thick layer of green undergrowth, including various grasses and small plants. The overall scene is lush and vibrant green.

It creates a nice understory

Photo from Maui



Bamboo stands moderate water cycles and Maui's are in trouble!



It yields nearly 1 ton/ha food from routine thinning = a new Maui grown food

Only the *Clumping* kinds
are used commercially



Photo from Big Island

A close-up photograph of several vertical bamboo stalks. The stalks are a light tan or yellowish-brown color with visible vertical ridges. In the foreground, a brown, pointed bamboo sheath is partially visible. A semi-transparent blue horizontal bar is overlaid across the middle of the image, containing white text. The background is a soft-focus green, suggesting a bamboo grove.

No worries about runaway bamboo!

Photo from Maui

Only 3-4 yr old culms are harvested



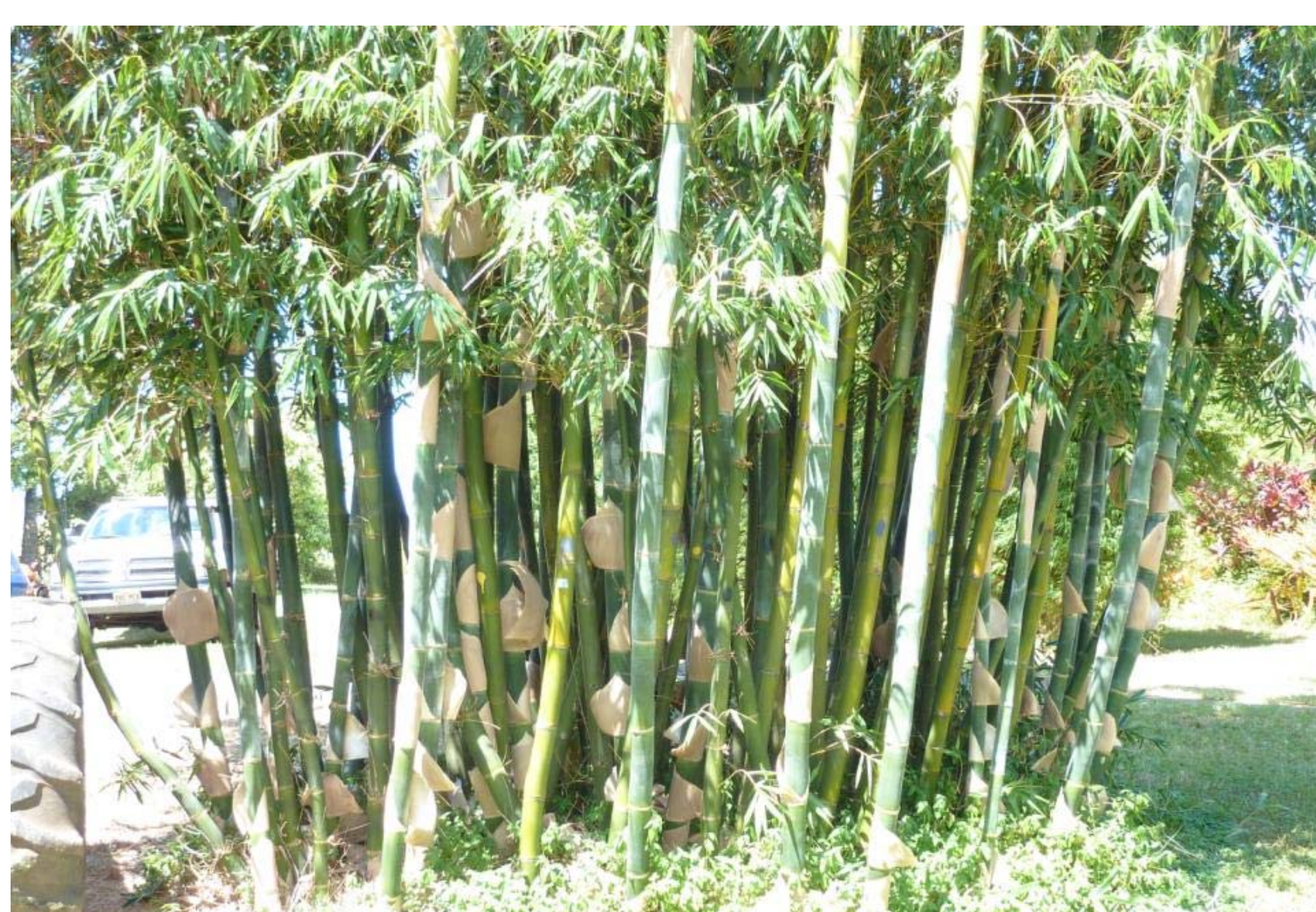
Photo from Maui

A photograph of a dense bamboo forest. The bamboo stalks are vibrant green and segmented, with some showing signs of aging or damage. The background is filled with more bamboo and other forest vegetation, creating a lush, green environment. A blue rectangular box with white text is overlaid on the upper portion of the image.

Leaving the bulk of the plant to
protect the surrounding eco-system

This avoids erosion





106 culms on this 6 year old plant on Maui - *Whispering Winds Bamboo*

Now
that's
real
Biomass!



Bamboo is amazing!





It's thick!

It's impressive!





Biomass for biochar and building products!

A photograph of a bamboo forest. The image shows numerous tall, slender bamboo stalks in various shades of green, some in sharp focus and others blurred in the background. The stalks are segmented, and some have small, pointed leaves sprouting from them. The lighting is bright, suggesting a sunny day, with some highlights on the bamboo surfaces.

And bamboo sequesters large volumes of CO₂

Photo from Maui

A close-up photograph of two bamboo stalks. The stalk on the left has a prominent, dark, circular lesion on its node, which is a sequester. The stalk on the right is also green but shows a smaller, less distinct lesion. The background is blurred, showing more bamboo and some brown ground.

Bamboo sequesters
Every year
In every hectare...

Photo from Maui




20 tons of CO₂/ Ha/yr in the soil

40 tons of CO₂/Ha/yr in the rhizomes

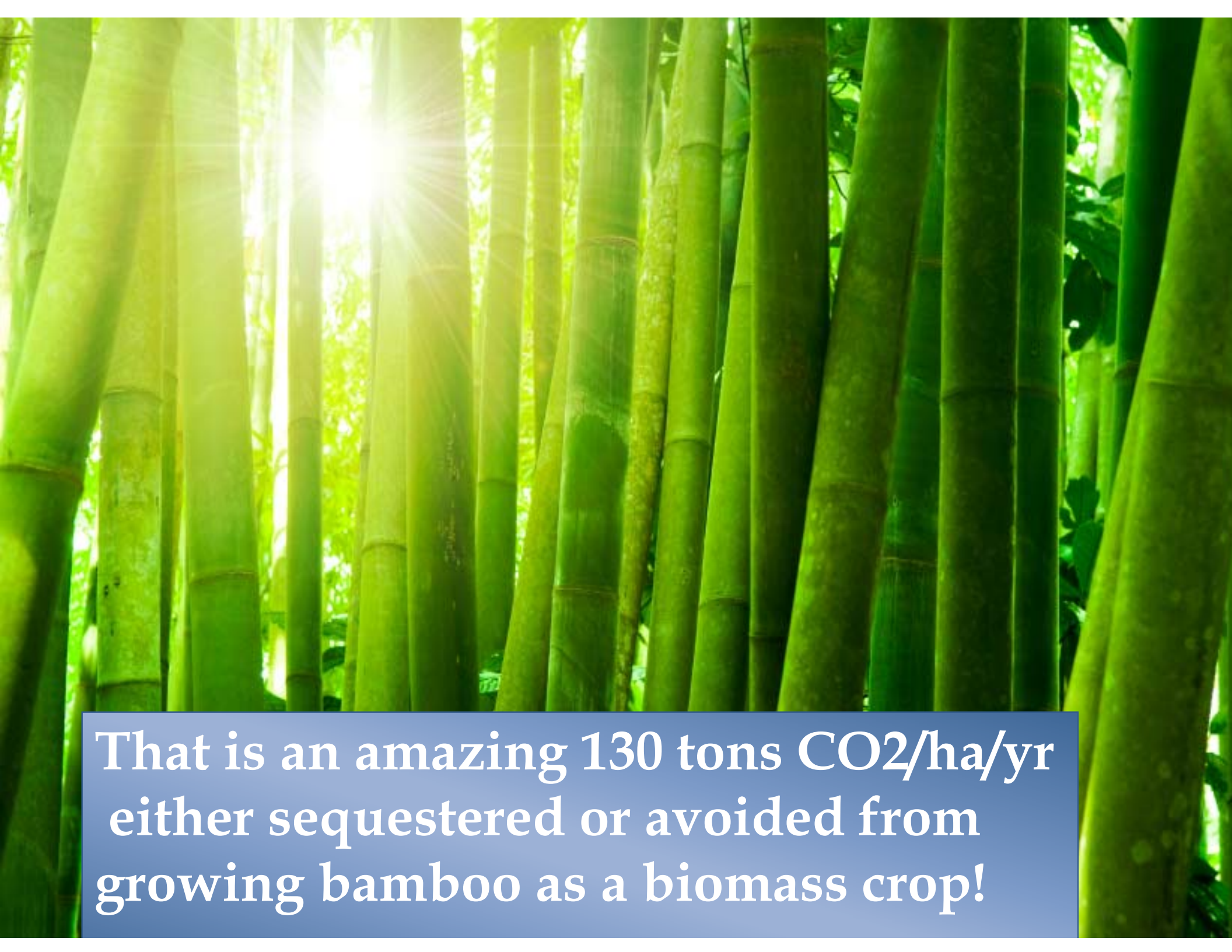




31 tons CO₂/ha/yr in BioChar

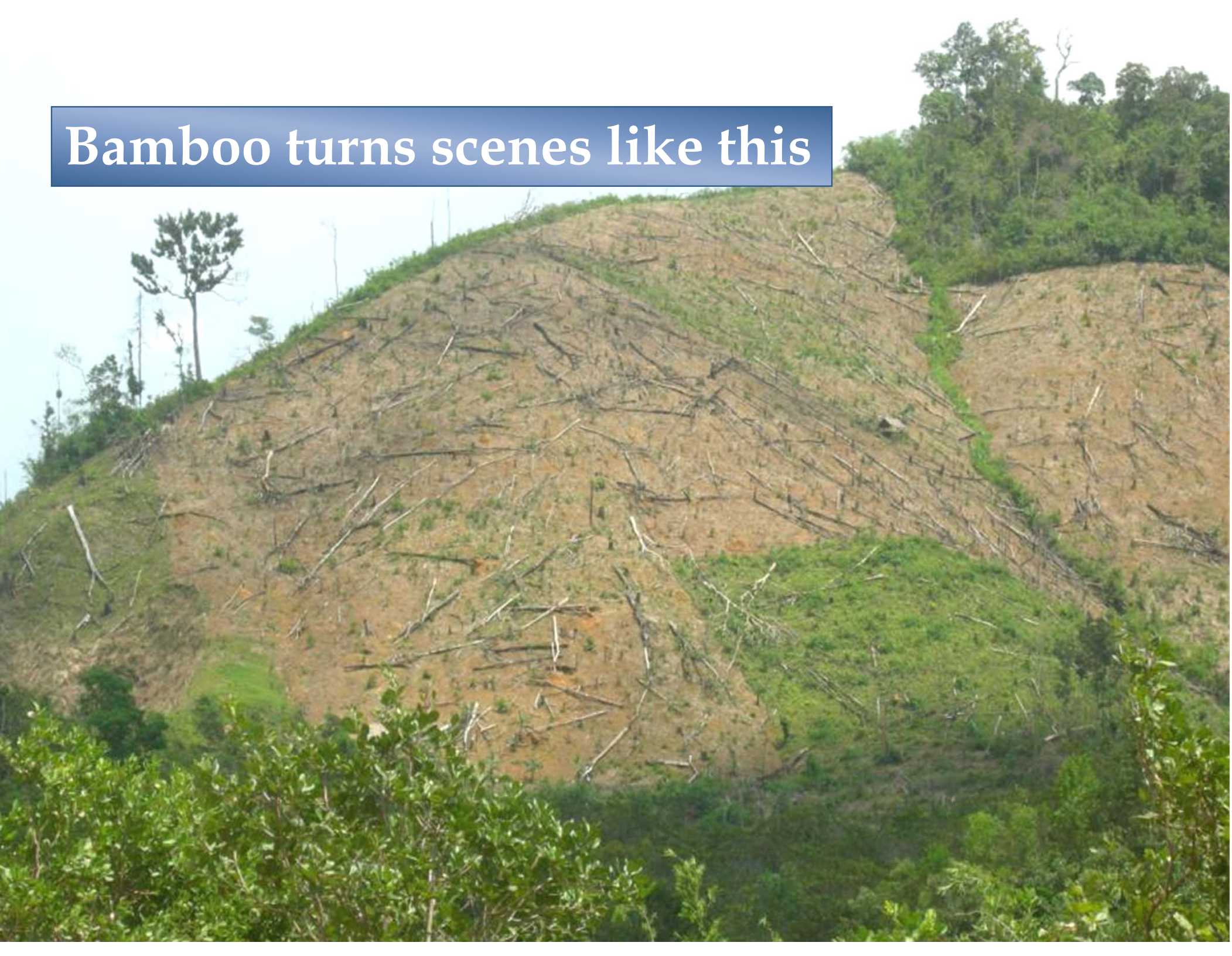


Or 50 ton/Ha CO₂e captured in building materials like this OSB



**That is an amazing 130 tons CO₂/ha/yr
either sequestered or avoided from
growing bamboo as a biomass crop!**

Bamboo turns scenes like this



Into scenes like this!





The United Nations has proven

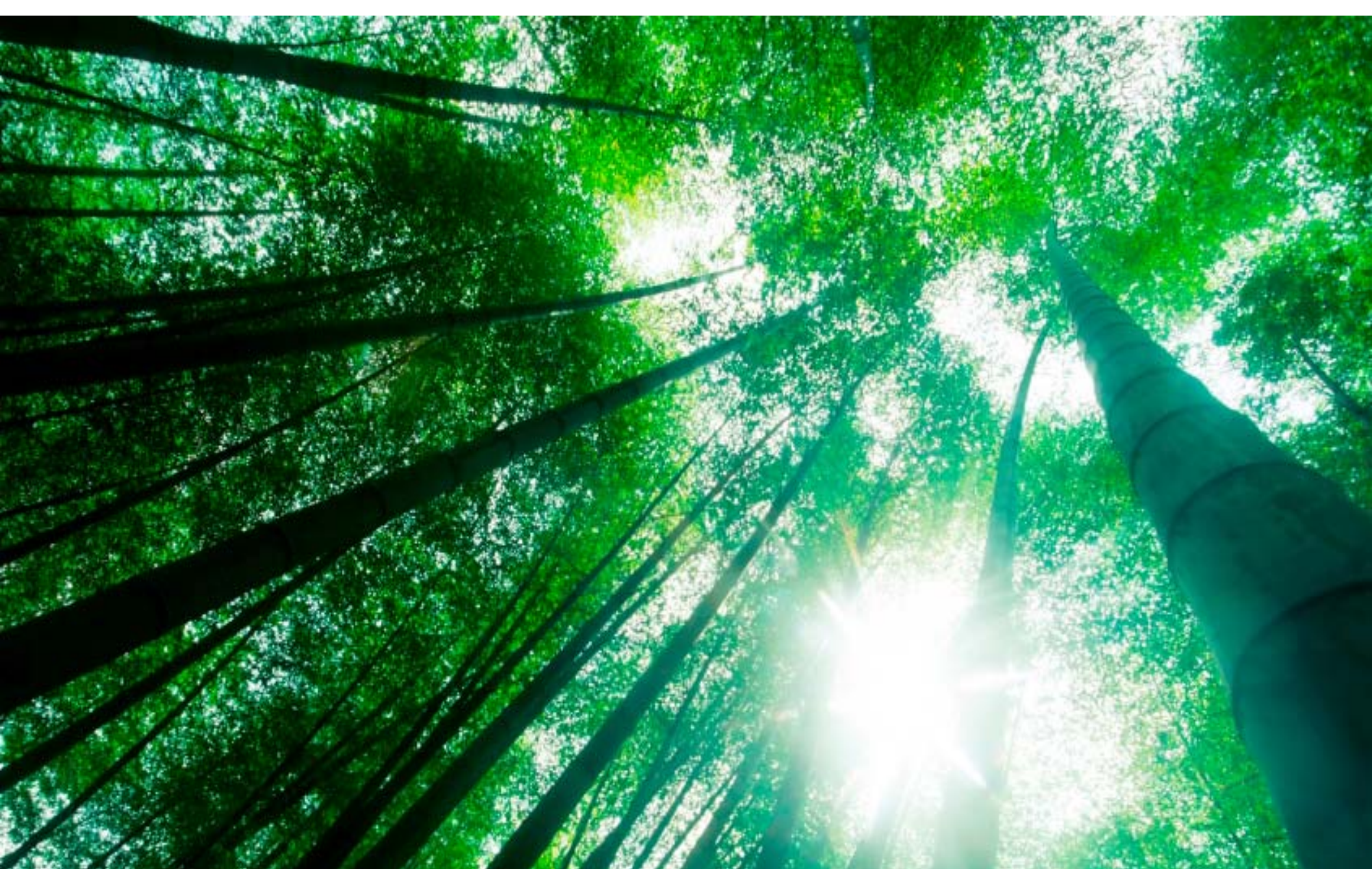
that bamboo can restore depleted soil....



Good for the environment
Good for small farmers
Good for carbon sequestration



A house on Maui that you could each visit in Iao Valley



Bamboo, the renewable biomass of choice!
Carbon Drawdown Solutions, Inc.

CARE Committee

From: Axel I. Beers
Sent: Tuesday, February 1, 2022 3:46 PM
To: CARE Committee
Cc: Kelly King
Subject: CARE-11 Presentation to Feb. 2 CARE Committee
Attachments: For Env. Comm.ppsx

Aloha, CARE Committee staff.

Sending this in a separate email. Please see the attached Powerpoint presentation from Char O'Brien regarding CARE-11.

Thank you,
Axel



Axel Beers, Executive Assistant
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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