



Engineering the bio-based future

Bamboo bio-fiber technology company



Advanced biobased lightweight materials for composite applications

High performance Bamboo fiber composites

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June 2024



envision a world that is 100% fossil-free

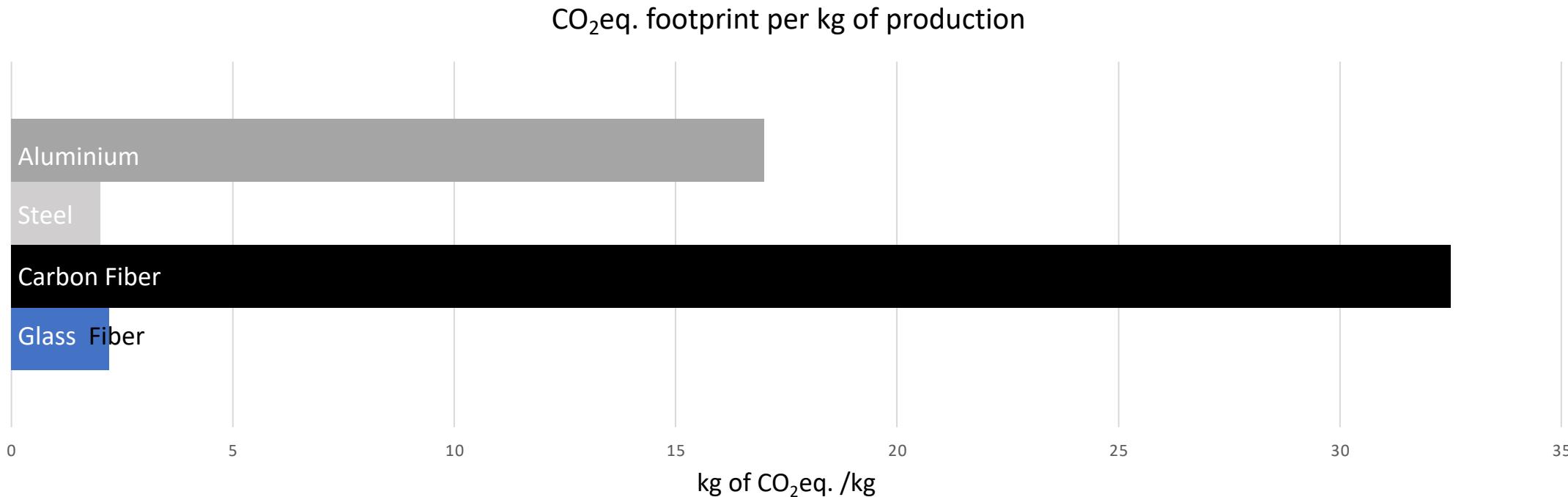
where makers and visionaries have sustainable access to bio-based and high-performing materials

Environmental Concern

Current Materials



The construction sector was responsible for 10 billion tonnes (27%) of CO₂ emissions in 2023.

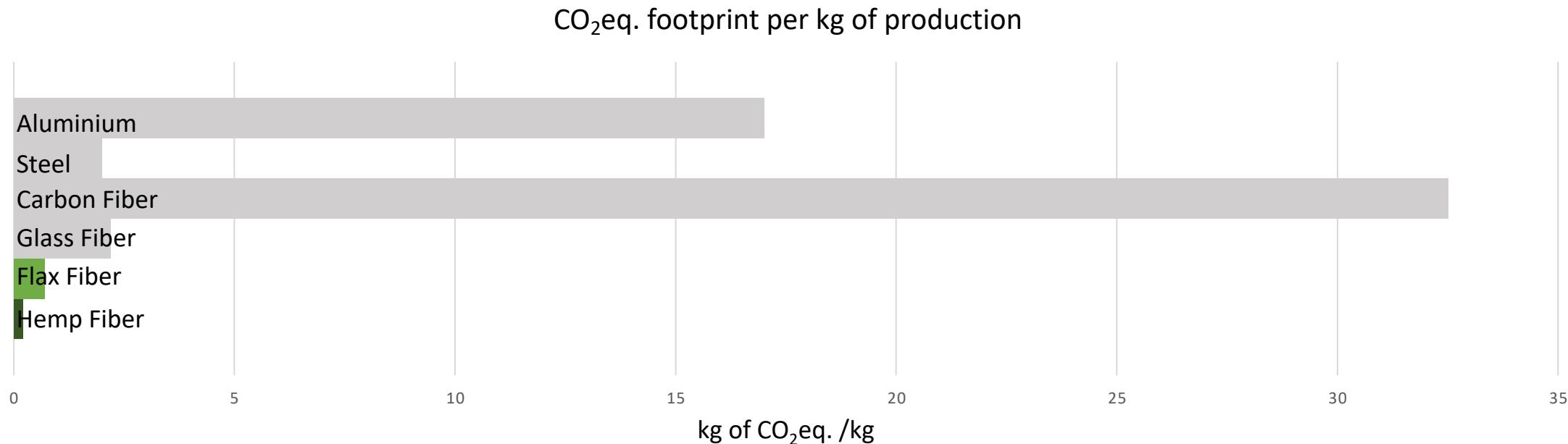


Natural Fibers

Sustainable Alternatives in Focus



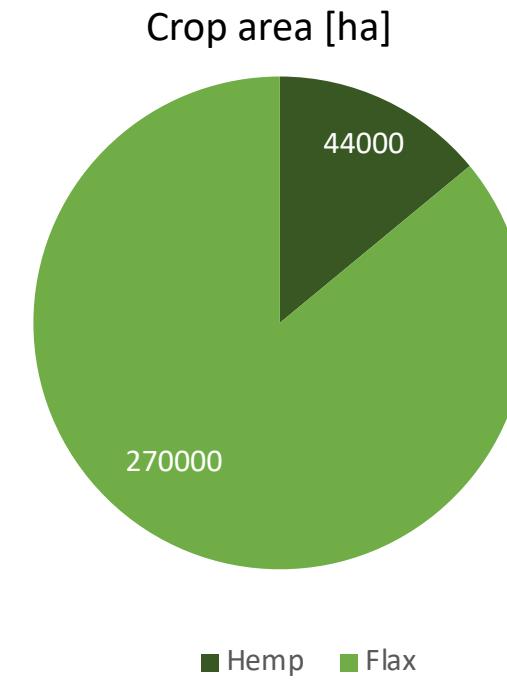
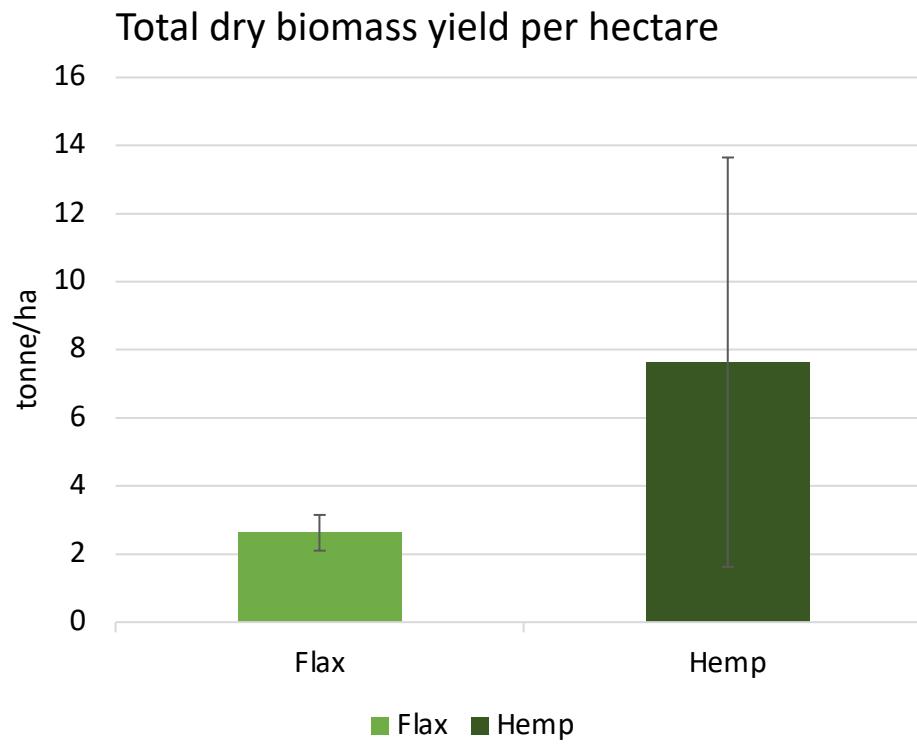
Flax and hemp fibers have a **substantially lower** CO₂ footprint, making them a sustainable choice for composites.



Availability Natural Fibers



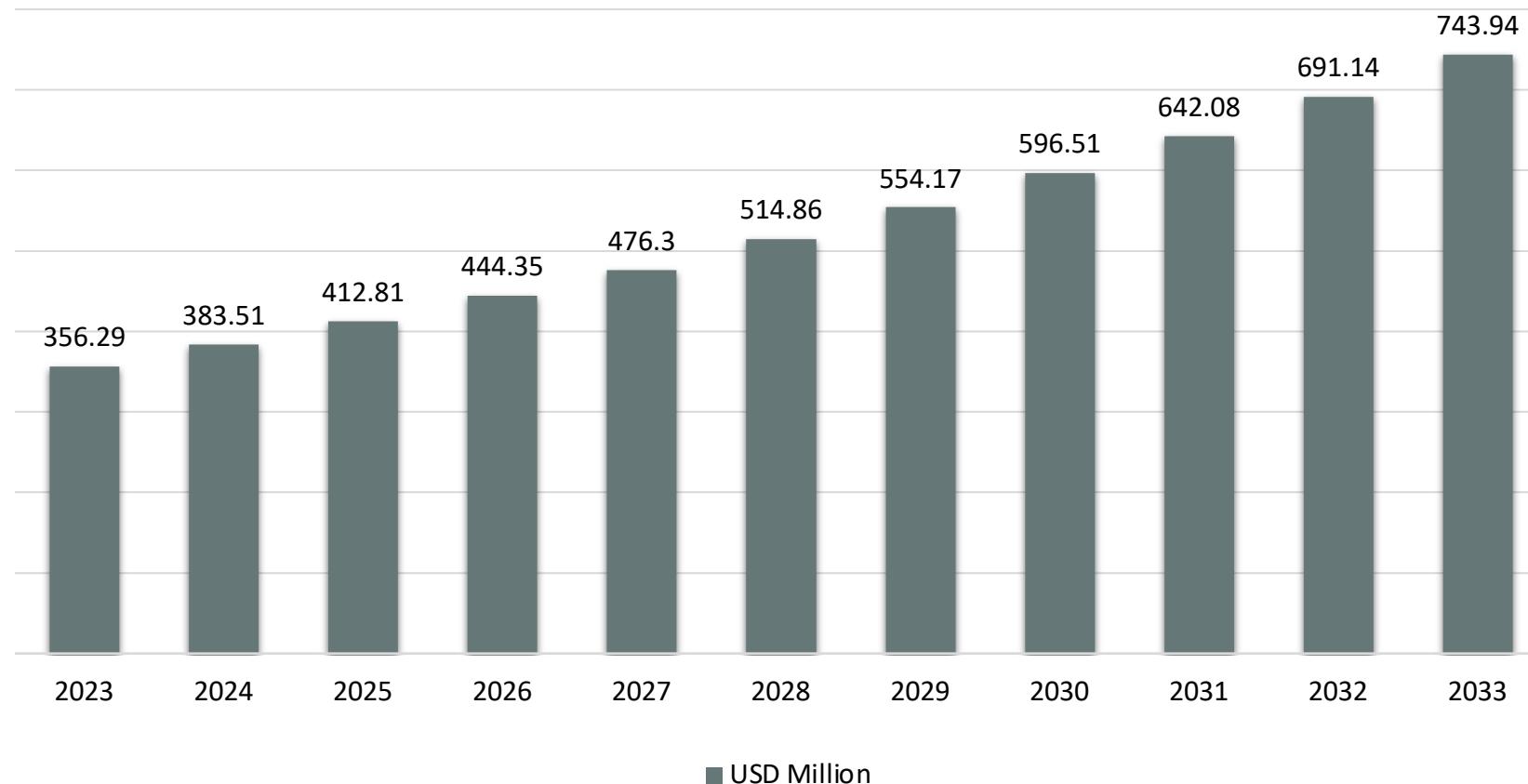
Flax and hemp are the **industry standard** for natural fiber in composite applications but are **limited** by the **crop availability** and **efficiency**.



Growth rate of NFRCs

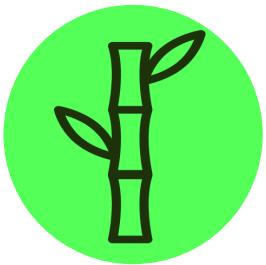


Natural Fiber composite market Size 2023 to 2033 (USD Million)



Bamboo

A Closer Look



Fast growth

Higher growth rate (1 m/day)



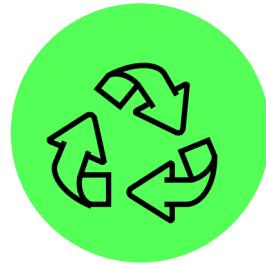
Strong

High strength to weight



Lightweight

Significantly lower than conventional materials



Renewable

Eco-friendly resource for sustainability



Worldwide availability

Bamboo can grow in almost all climates



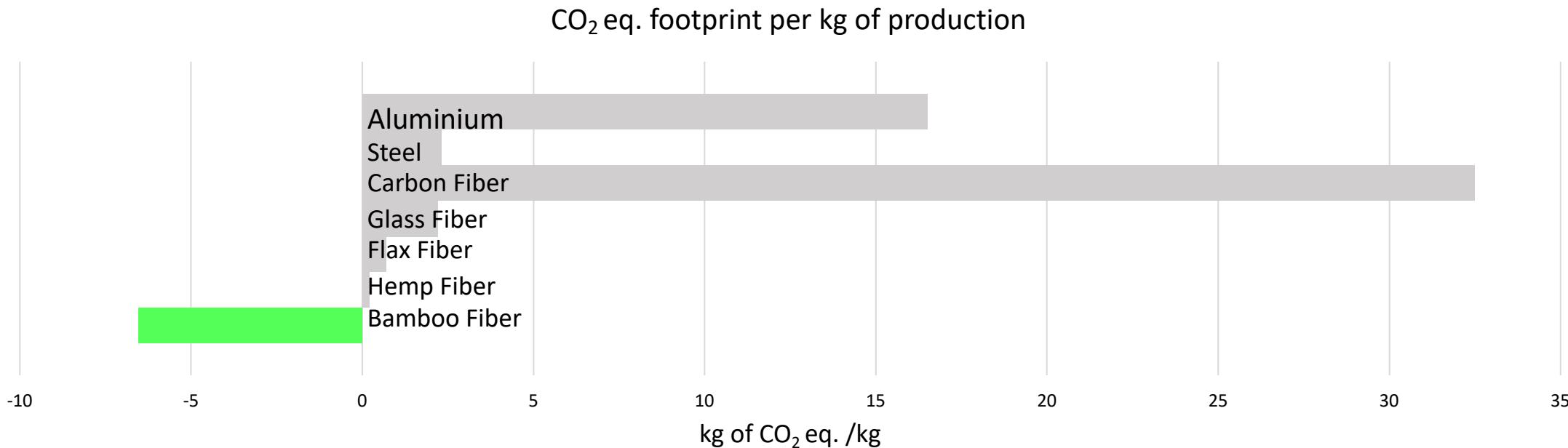
CO₂ reduction

Bamboo uptakes CO₂ during growth

Future proof solution



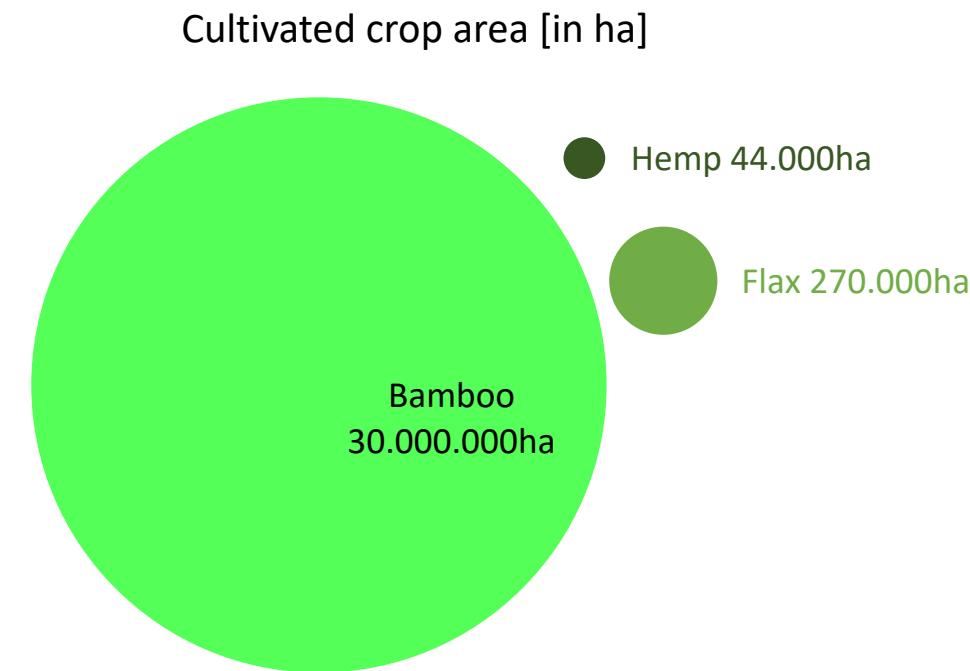
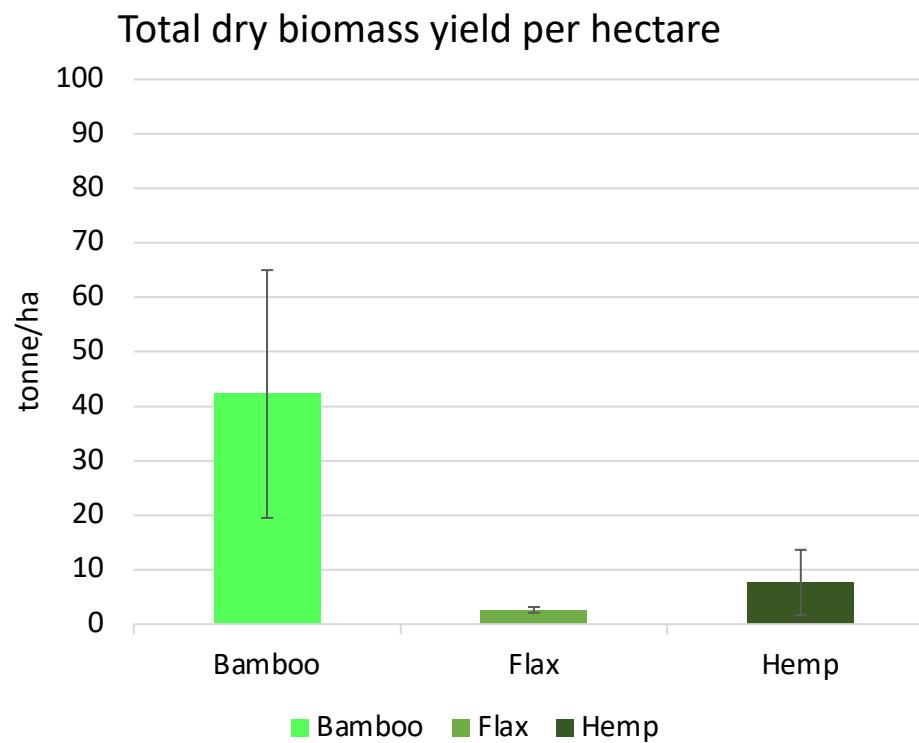
The **CO₂ footprint** of bamboo fibres is **negative** because of the high CO₂ absorption of bamboo as a crop.



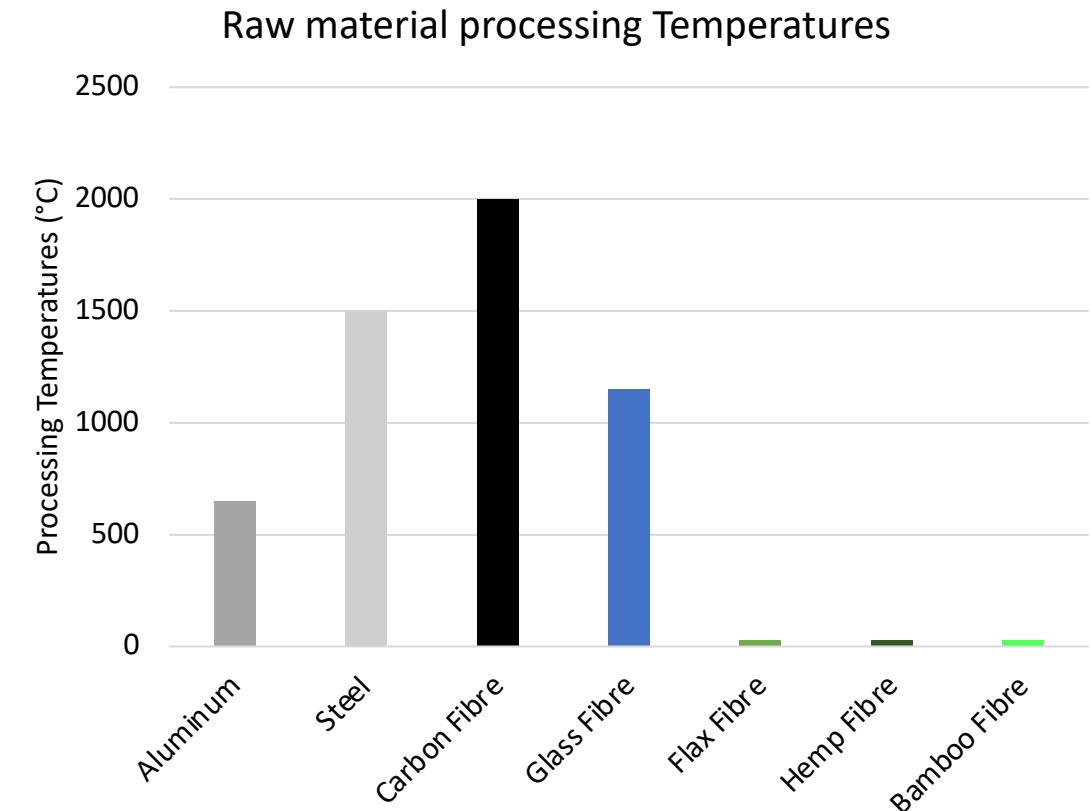
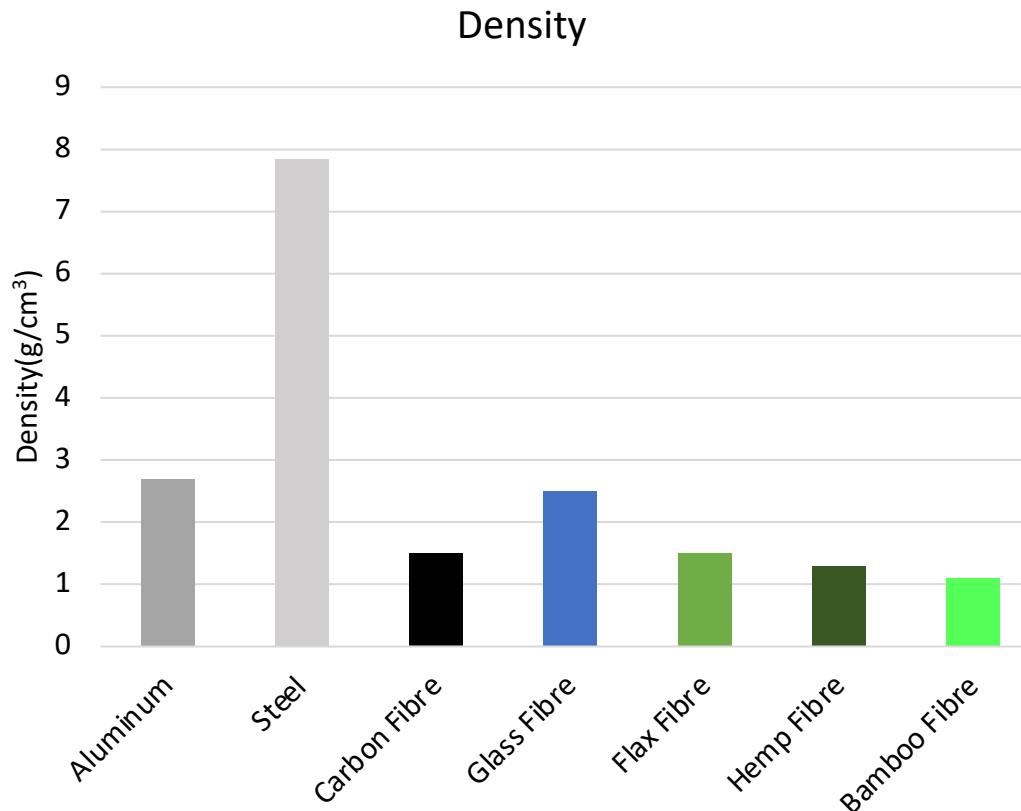
Bamboo Abundance Accessibility Advantage



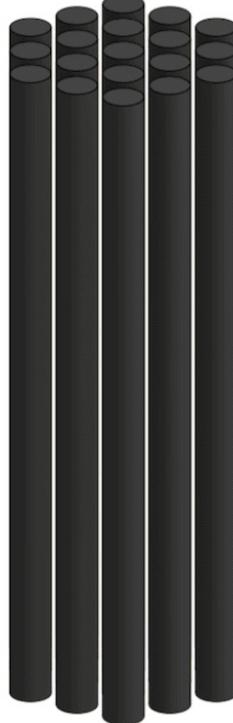
Bamboo is a **future-proof, sustainable and biobased solution** for composite applications.



Density & Processing temp.



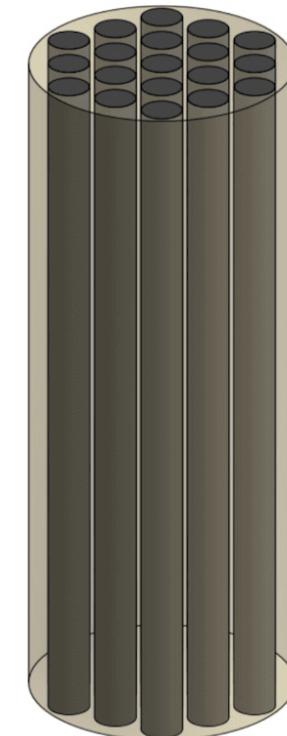
What is a composite?



+



=



Fiber

Matrix

Composite

Bambooder introduction



Is **the** company that has developed a **patented technology** to mechanically extract bamboo fibers for high-performance composite applications.

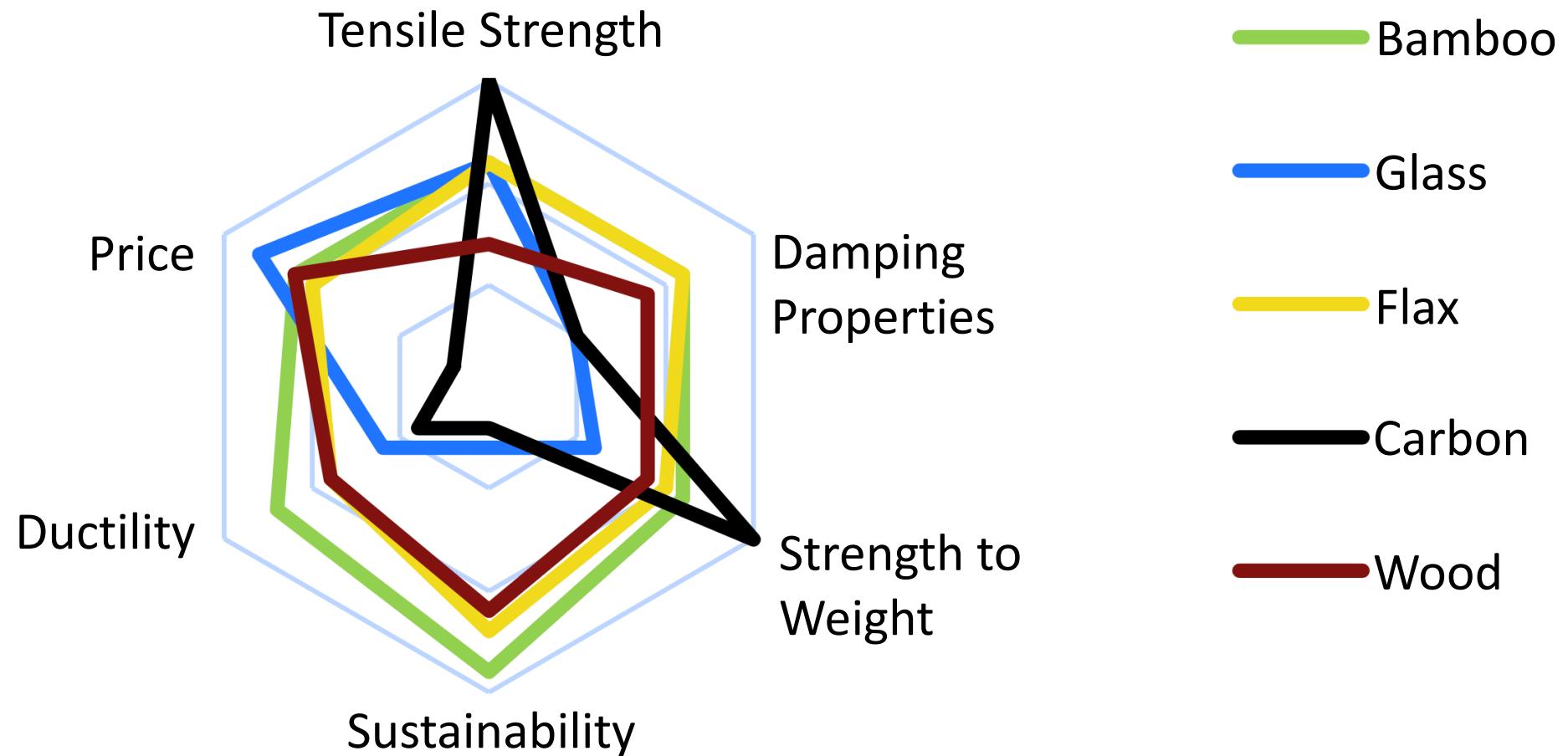
Composites made from Bambooder biobased fibers can **compete** with steel, aluminum, carbon, glass fiber, flax and hemp fiber.

No chemicals are used, which leads to the optimal preservation of mechanical properties.

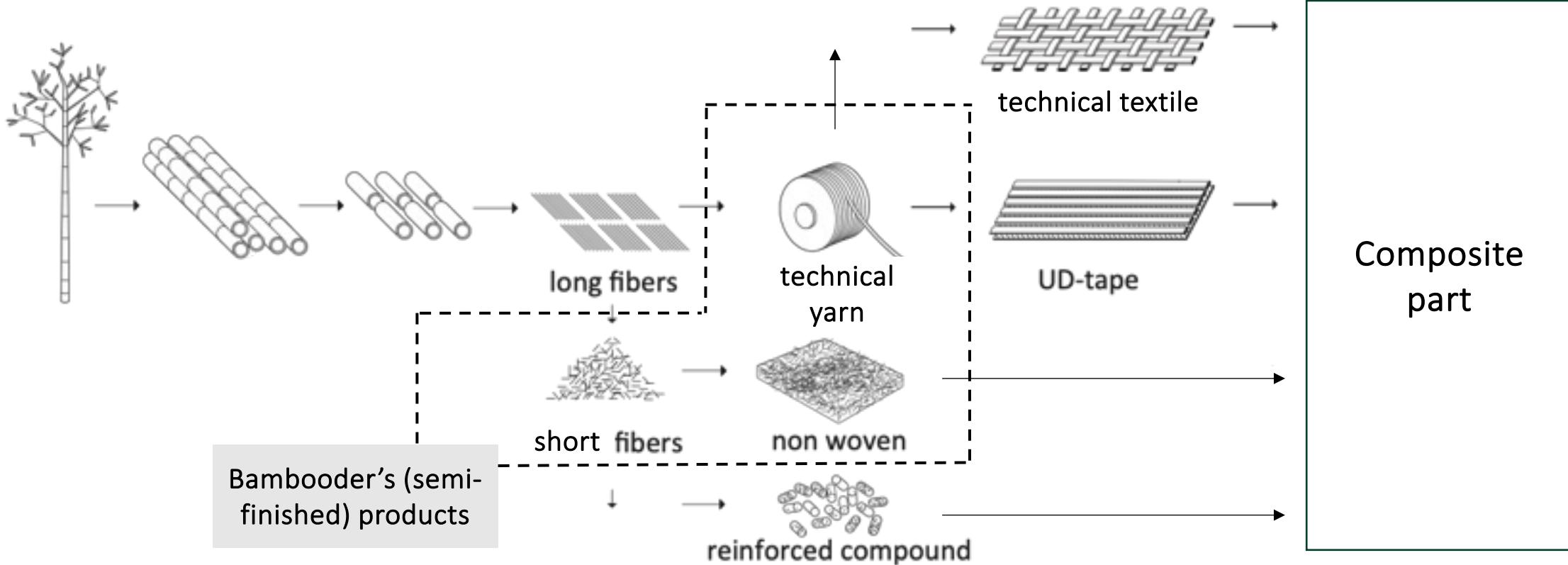
Industrial markets focus - **lightweight, strength and CO2 reduction** is required.



Bamboo compared



Smart use of resource



Patent long fibers

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



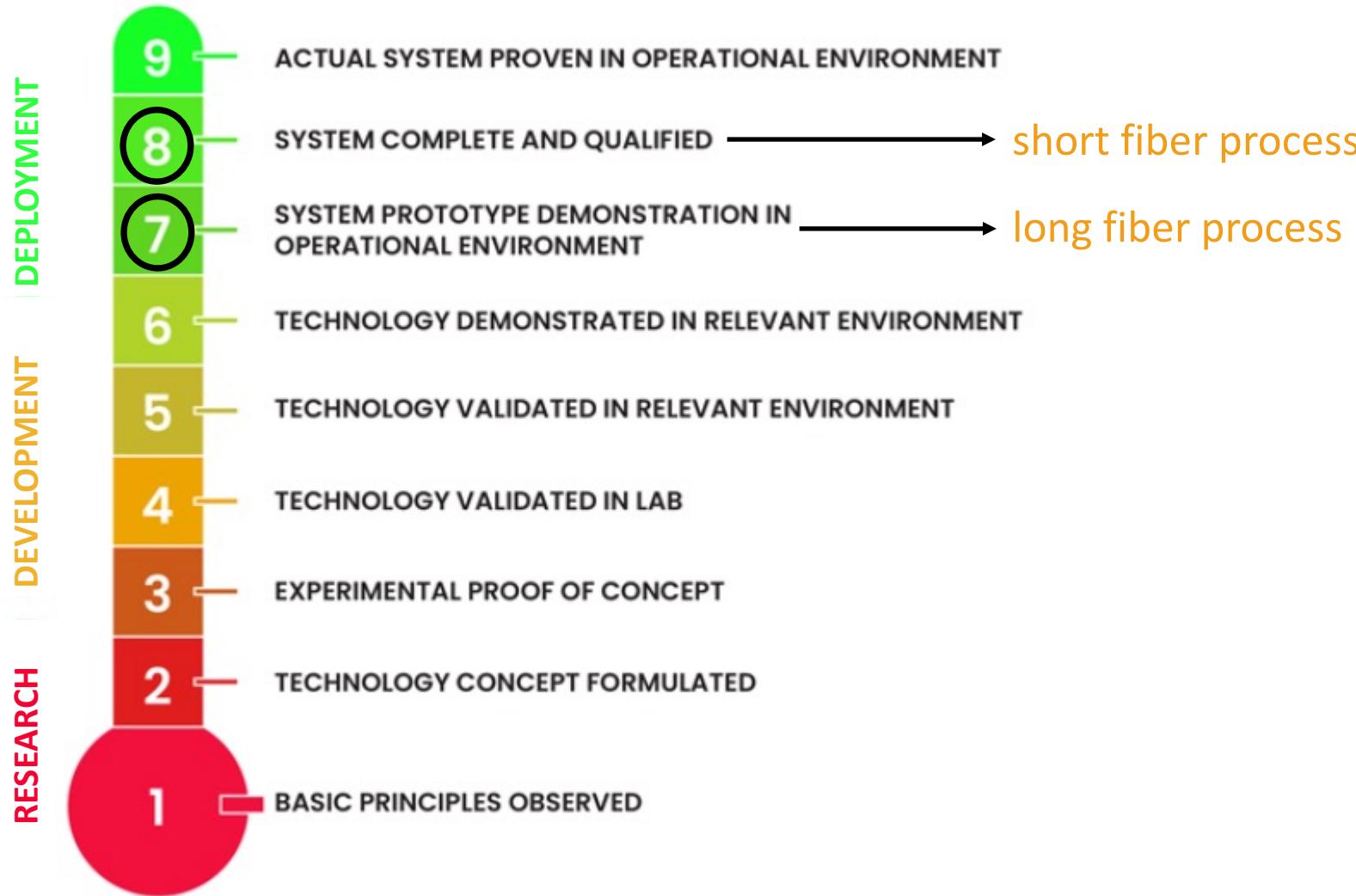
(10) International Publication Number
WO 2019/093898 A2

(43) International Publication Date
16 May 2019 (16.05.2019)

Patent short fibers

Patent approved

State of Art





SHORT FIBER



LONG FIBER

 bambooder

Products (RAW fiber fractions)



Products (SEMI FINISHED)

 bambooder

SHORT
FIBERMATS

Semi-finished products



Short fiber mats



preform



prepreg



sandwich

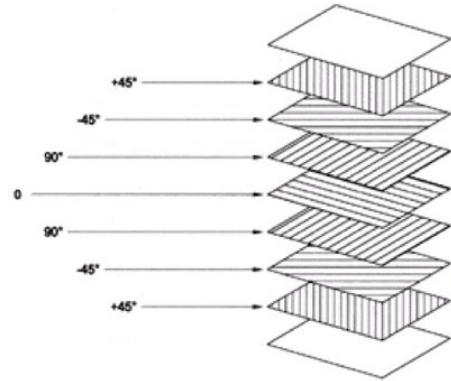
Long bamboo fiber yarn



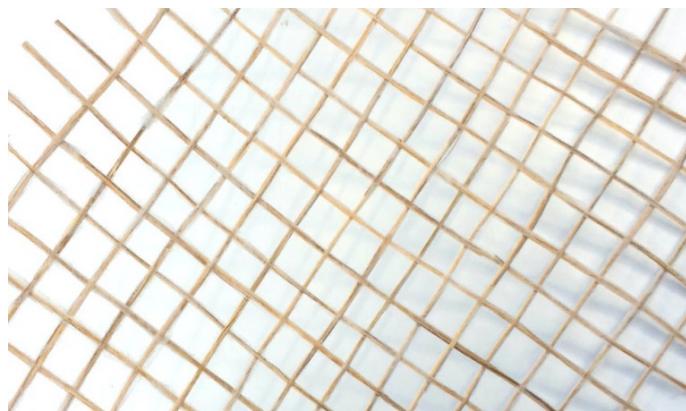
Semi-finished products



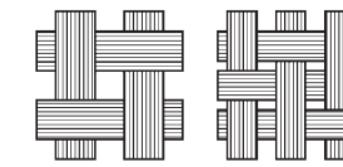
Reinforced bamboo fiber UD tape



Reinforced bamboo fiber net



Reinforced bamboo fiber woven textile



Plain weave

Twill weave

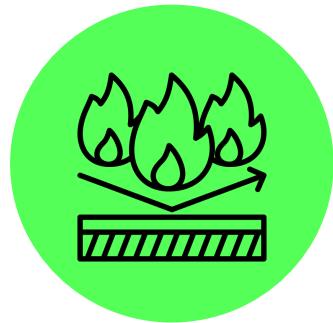
Bi-axial

Tri-axial

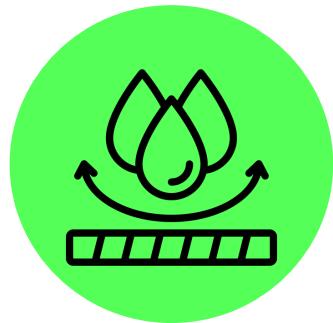


Work in progress

Construction Requirements



Fire Resistance



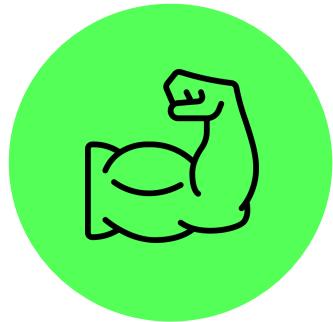
Water Resistance



Thermal Insulation



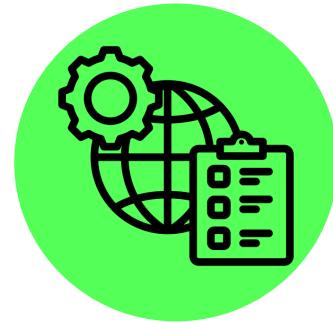
Sound Insulation



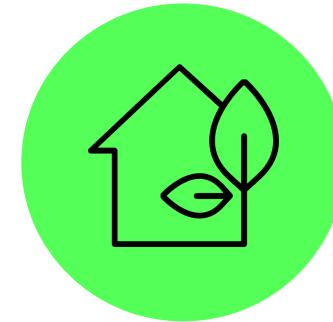
Mechanical Strength



Durability and Weather Resistance

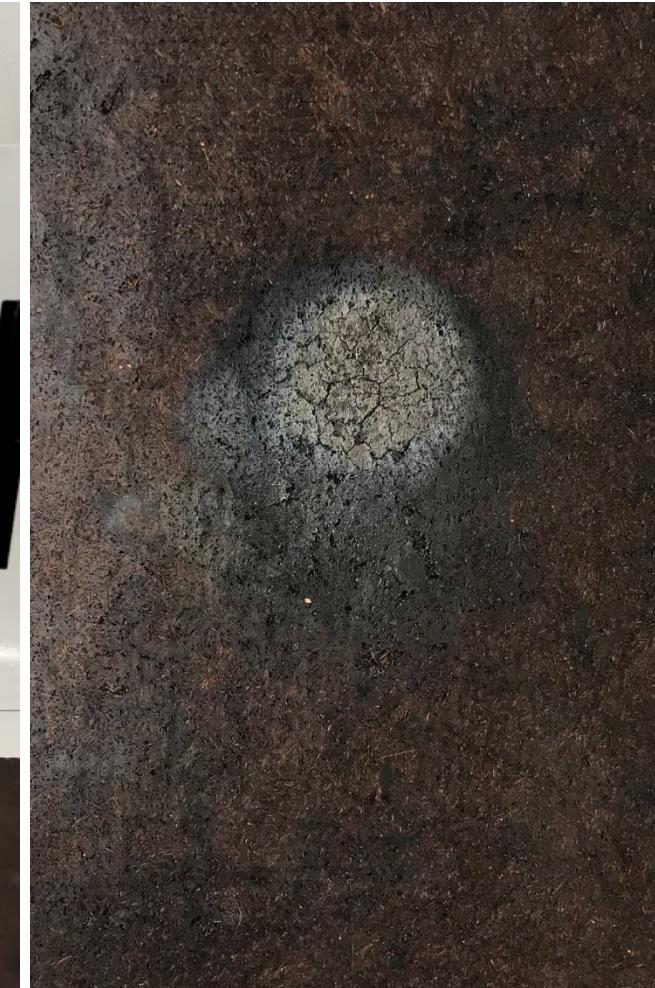
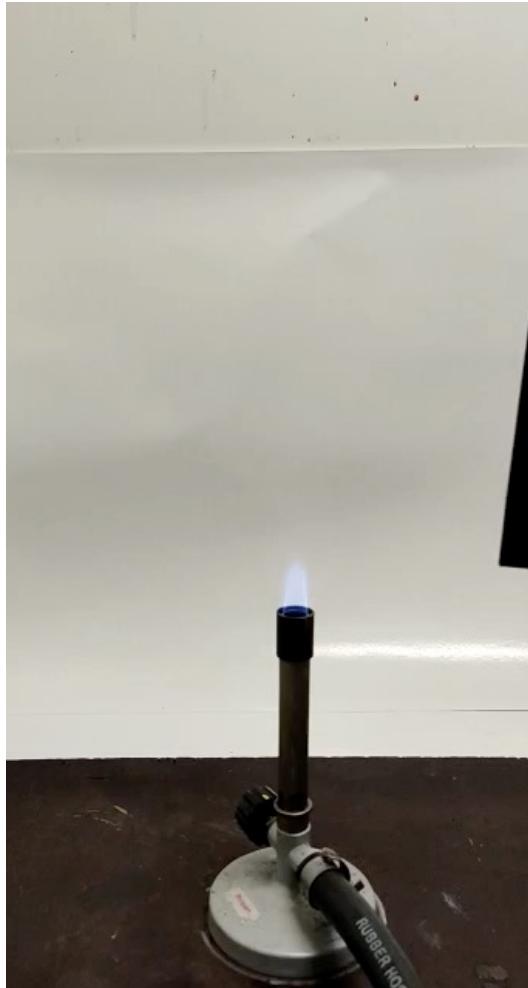


Environmental and Health Standards

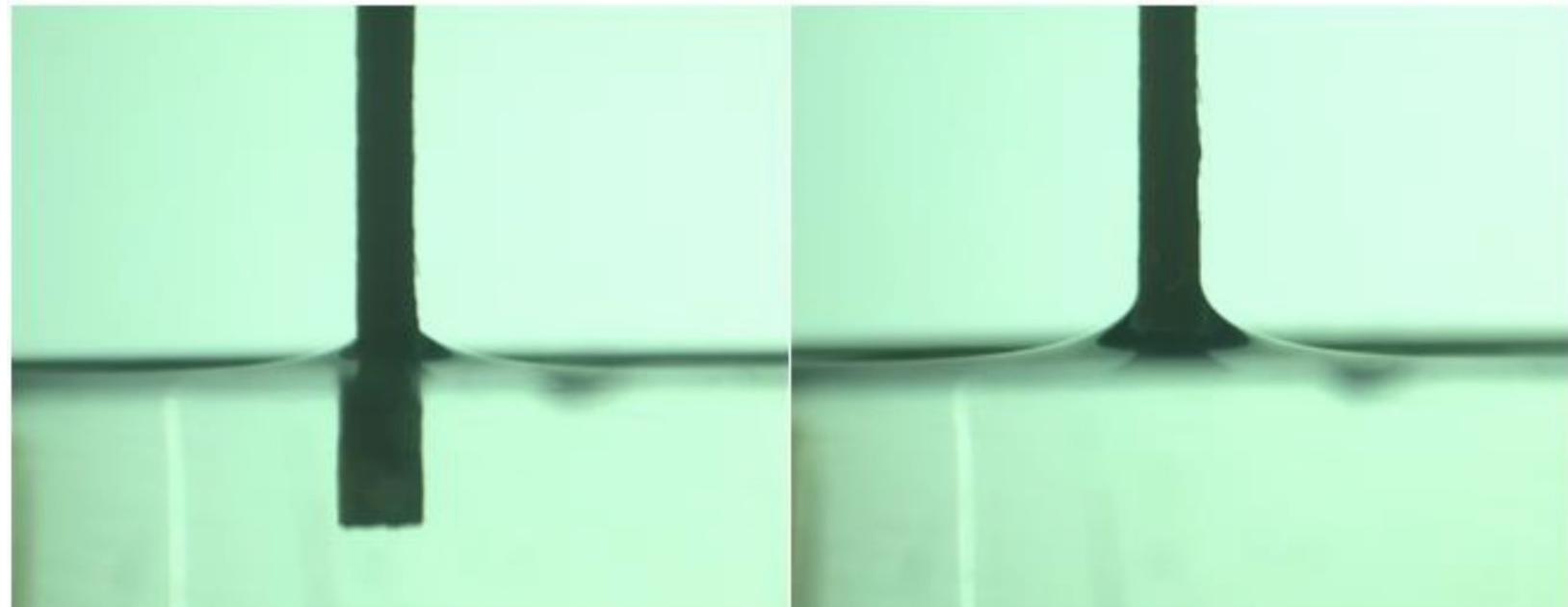


Sustainability Certifications

Fire Resistant



Water Resistance



Thermal, Sound Insulation

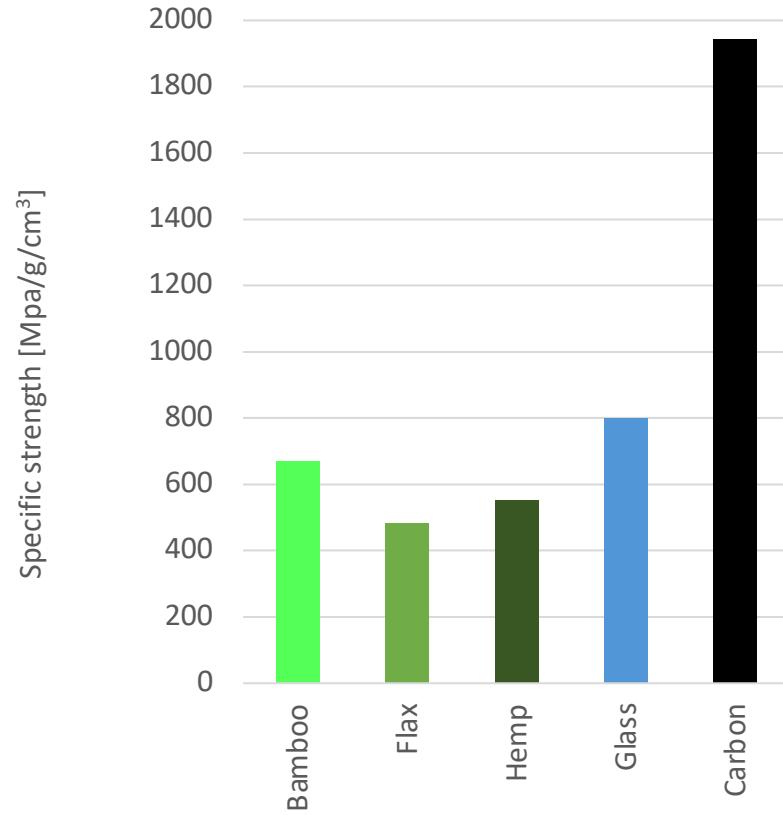


Bamboo – Cork epoxy sandwich panel

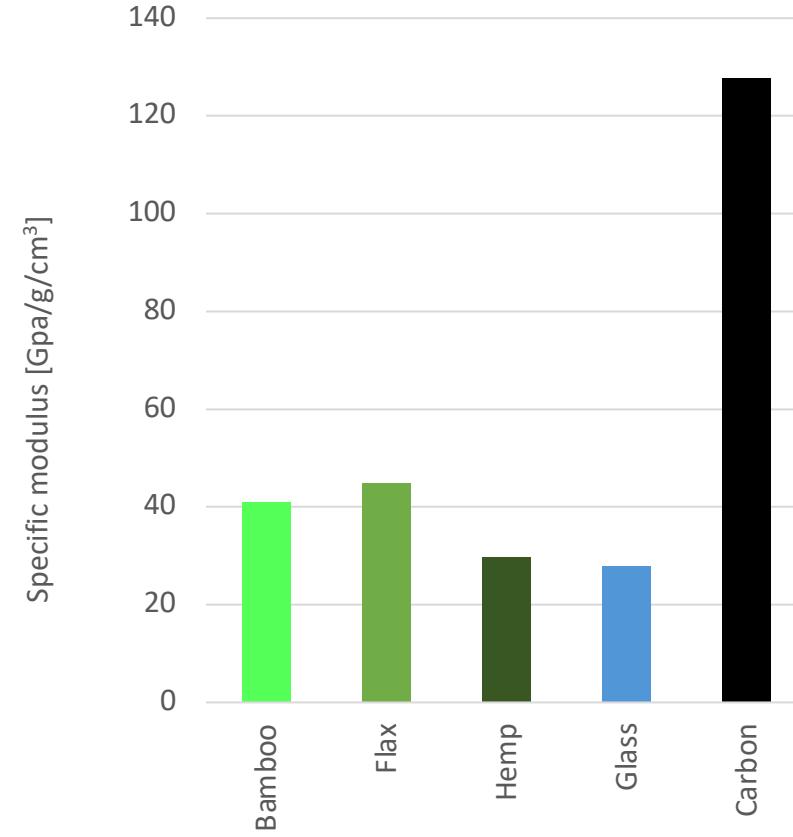
Mechanical Strength



Specific tensile strength



Specific E-modulus



Environmental & Health Standards (SDG)



Case Studies

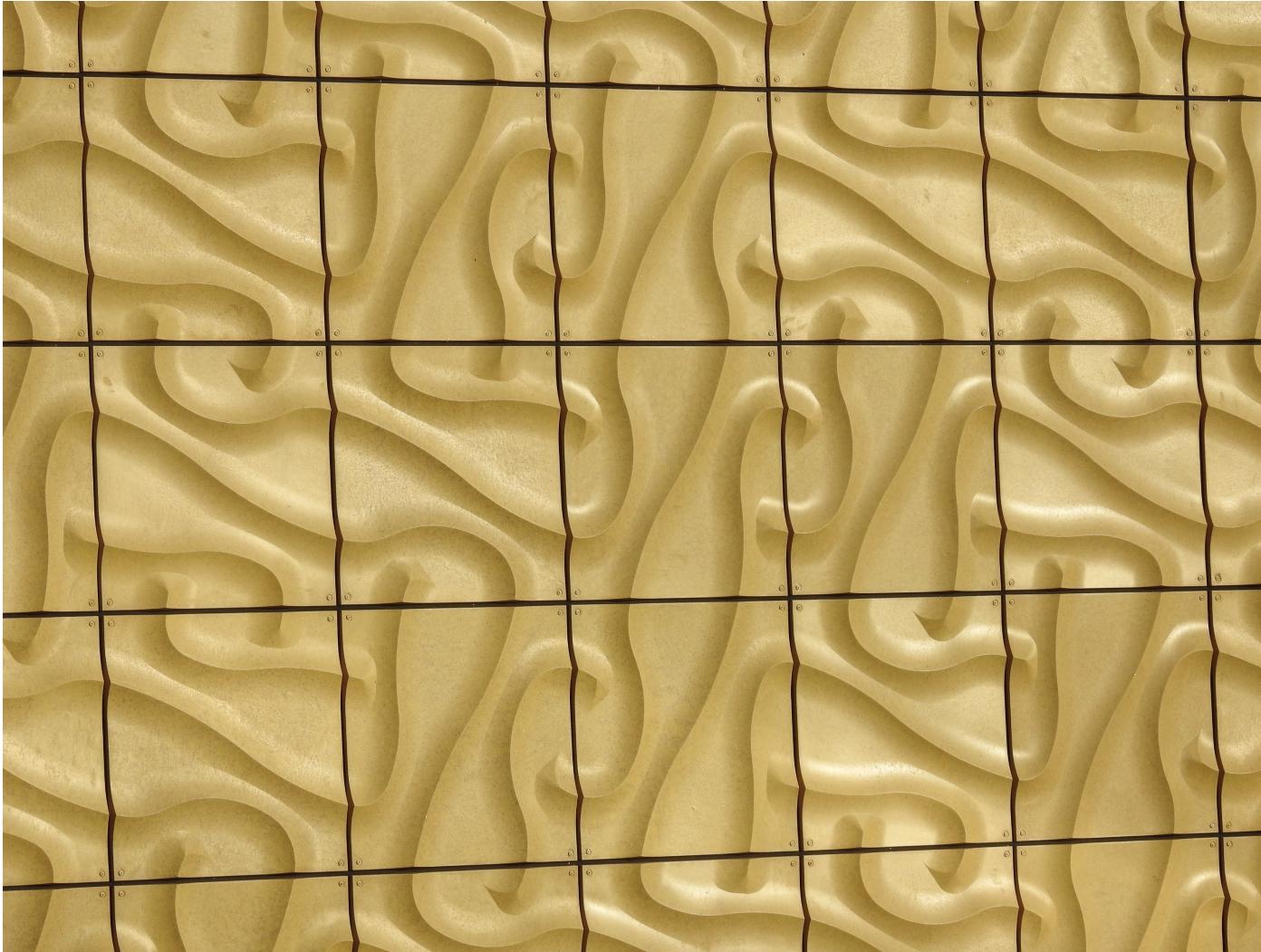
Biobased Traffic sign

 bambooder



Facade

 bambooder



Aluminium versus 100% biobased



Bamboo/Polyester

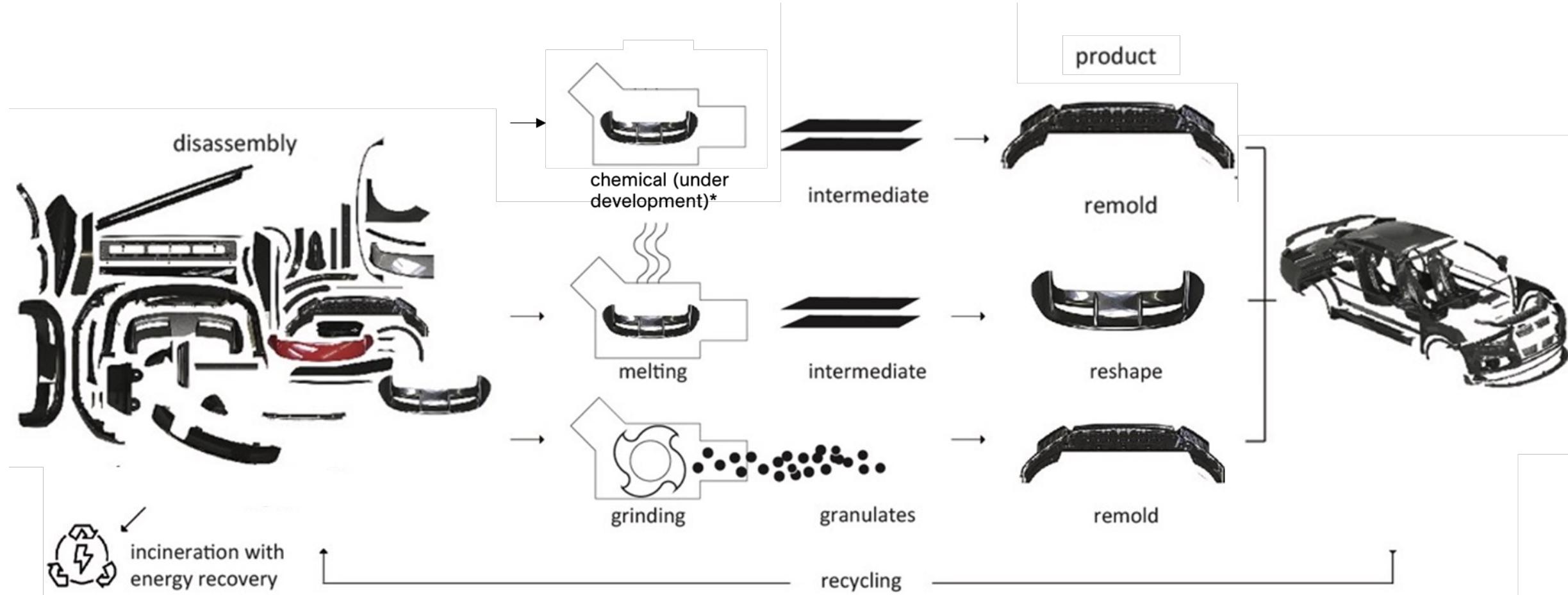


Aluminium



Smart re-use of resource

End of life



Ambition

Lowering Carbon Footprints

Enhancing Accessibility

Innovative Solutions

Empowering Sustainability

Building a Greener Future



Scope for Future



**Innovative Product
Development**



**Strategic
Partnerships**



**Market
Expansion**



**Sustainable
Practices**



**Manufacturing
Excellence**

Team



Marc Bokeloh
CEO, FOUNDER



Almer van der Stoel
CFO



Johan Kocks
R&D Manager



Michel Jansen
Senior Business Developer



Sowrabh Shetty
Business Developer



Why settle for a mere future when you can build a sustainable one?

