



# KiriCore

## Sustainable Materials

We are a



MEMBER

This SME Innovation Project has received cascade funding from the European Union's Horizon 2020 research and innovation programme under the GreenOffshoreTech project and Grant Agreement No 101005541.



**Green  
Offshore  
Tech**



# EUROPEAN WIND ENERGY MARKET

- to reach EUs 2030 target for renewable energy  
**37 GW** of newly installed wind farms are  
required each year

according to ec.europa.eu 2023

- this results in approx. **7.400** new wind turbines per  
**year alone in the EU**

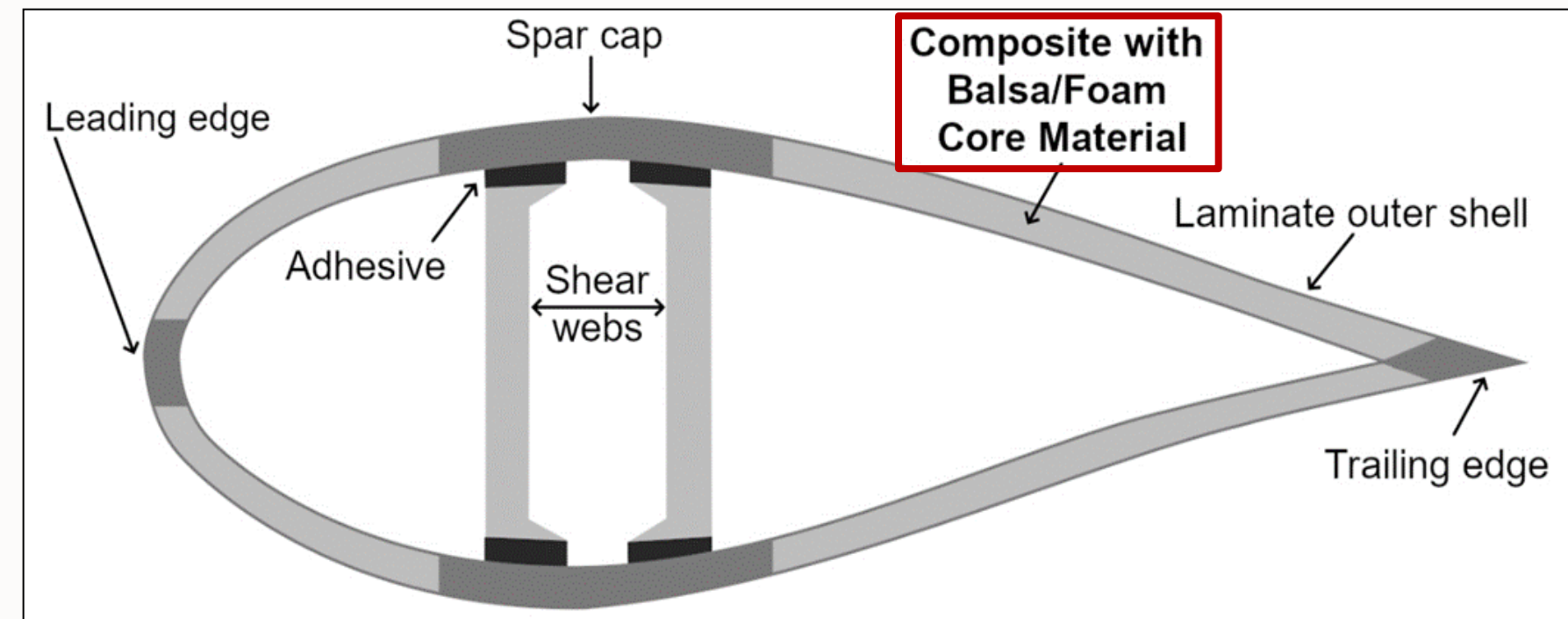
with an average size of 5 MW per wind turbine





# DID YOU KNOW, THAT...

- rotor blades of wind turbines have **wooden cores**
- of this so-called **core material**, 15 cubic meters are needed for one wind turbine
- this material must be very **light but strong**
- until now only **tropical Balsa wood** or **hydrocarbon-based foams** have met these requirements



# KIRICORE'S SOLUTION

supported by EU funding  
we developed

## KIRICORE MATERIAL

as a substitute for Balsa/foams in rotor blades of wind turbines

- we already reached **TRL 5** with support from FRAUNHOFER IWES
- a major European rotor blade manufacturer is building a blade prototype with our **KIRICORE MATERIAL**
- **KIRICORE MATERIAL** can replace core materials in other composite applications (rail, aviation, automotive)

our secret:

**KIRICORE MATERIAL** is made from **KIRI WOOD**





## Kiri wood grows in Europe

next to production facility → in contrast: 90 percent of Balsa is sourced from Ecuador

## Kiri wood has a low carbon footprint

due to short transport distances, also: CO<sub>2</sub> certificates based on Kiri wood plantations are already available

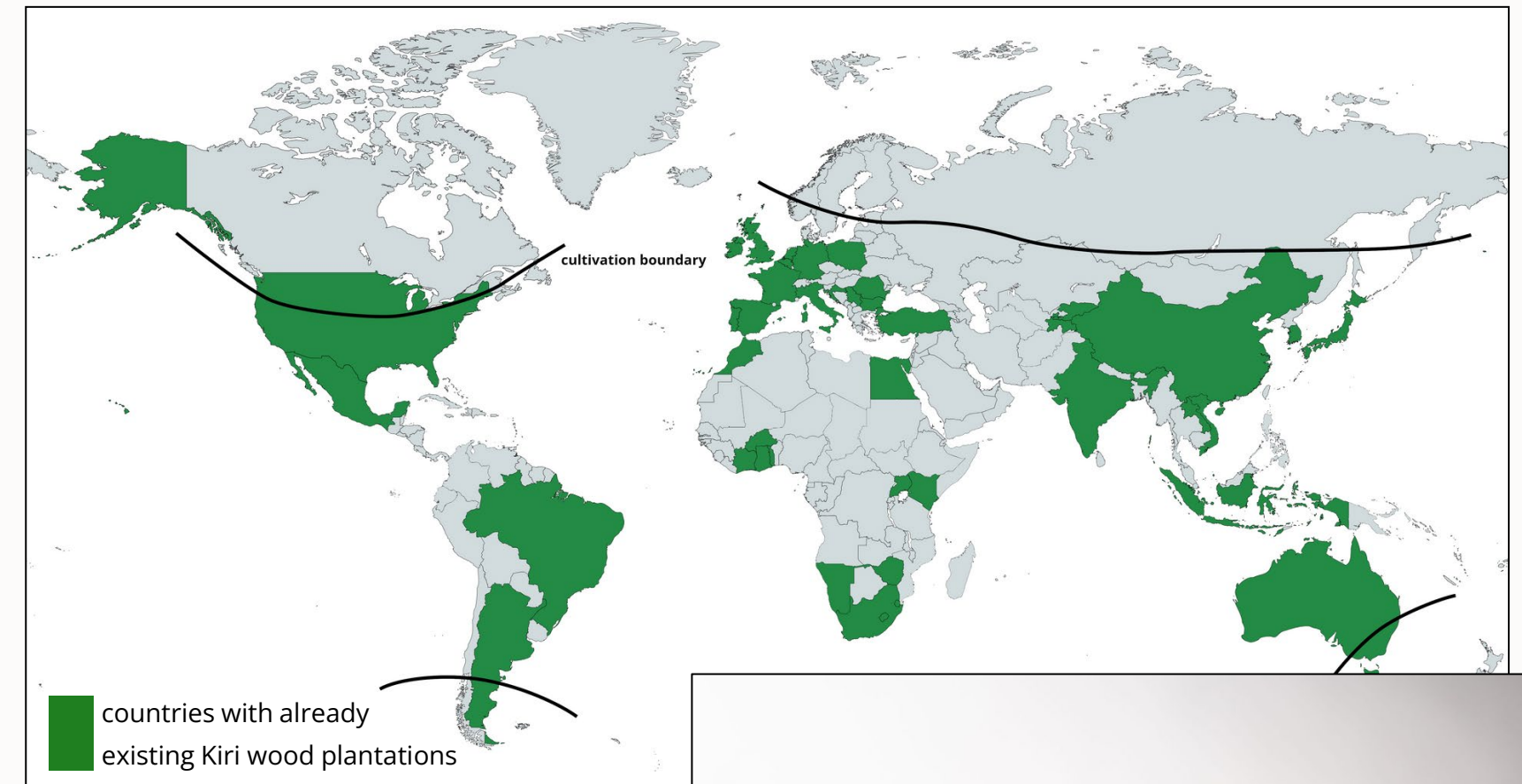
## Kiri wood has a lower resin uptake

which lowers resin consumption and leads to better recycling

## Kiri wood is cost-effective and disruptive

it is cheaper than Balsa: in our experience up to at least 20 percent and it creates competition in a market dominated by a small number of suppliers

→ **KIRI WOOD** has a more resilient and sustainable supply chain and a greener life cycle





# KIRI WOOD AS A DISRUPTIVE PRODUCT

## THE MARKET FOR CORE MATERIALS

- in Europe for 2025 is estimated to be 150 million Euro  
with an expected growth of 8 percent per year

## THE BUSINESS MODEL

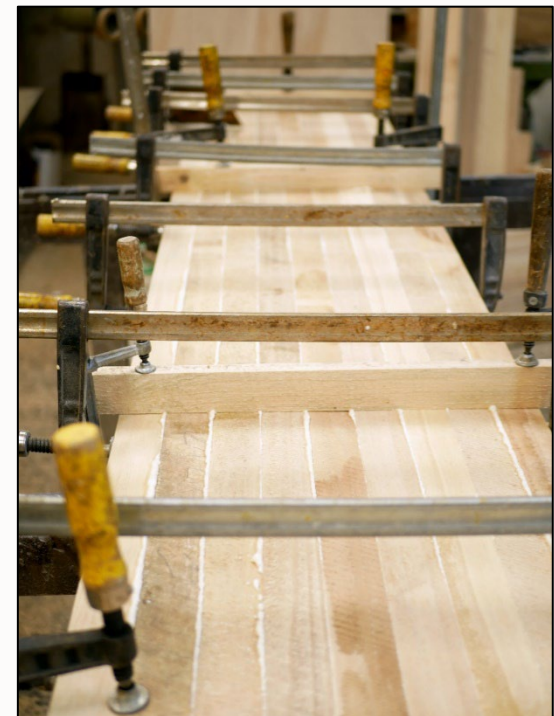
- our product, the KIRICORE MATERIAL mats are competitive to Balsa CORE MATERIAL mats

## OUR COMPANY

- is already profitable and growing

## OUR TEAM

- we are the first with the competence and experience needed for sorting and processing of KIRI WOOD into KIRICORE MATERIAL mats according to the specifications of the rotor blade manufacturers and the logistics and handling of larger amounts of Kiri wood





# WHAT WE ARE LOOKING FOR

*a partner to bring KIRICORE  
MATERIAL to the market wnext  
steps:*

- *certification and testing*
  - *prototyping*
  - *establish supply chain*
  - *start pilot production*
  - *establish sale channels*
- } *goal: to reach at least TRL 8/9*

Martin Hein

[martin.hein@kiriore.eu](mailto:martin.hein@kiriore.eu)



our KiriCore Kiri plantation in southwest Poland (source GoogleEarth, 2023)