

Hemp4Performance – Hemp bast composites for high-performance applications in the circular economy

Problem / Motivation

- Increasing demand for wood as a raw material,
- Increasing government regulations to protect the environment and forests,
 - ➔ Substitution of wood with bio-based materials, e.g. hemp for non-load-bearing elements,
 - ➔ Research into the use of hemp in the manufacture of furniture boards and wall elements in building construction to meet the needs of industry

Solution

- Development of bio-based panels and profiles made from hemp stalks, scutched fibres and hemp bast,
- Optimised manufacturing processes for the formation/processing of hemp fibre material and bio-based resins for the production of panels and profiles,
- Development of a closed-loop process to increase material circularity and waste prevention,
- Collaboration with international partners on the following topics:
 - Development of bio-based vitrimer resins
 - Development of methods for optimised cultivation and harvesting processes

Project Launch

07/2025

Project Partner



Acknowledgement

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