

Novel fibre value chains and ecosystem services from sustainable feedstocks

#### **ECOMONDO**

Rimini (Italy) 07.11.2024

MANIFAKTURA
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# Novel fibre value chains & ecosystem services from sustainable feedstocks

**CBE JU contribution**: € 4.49 million

**Duration**: June 2023 – May 2027

Feedstock: Hemp, wood, thistle, cattail and common reed

Main products: Fiber-based products: insulation rolls and boards,

composites for cars, bioconcrete and yarn

FIBSUN aims to support the development of resilient and competitive production systems and enhanced provision of ecosystem services from degraded soils through five sustainable fibre value chains for construction, automotive and textile sectors.







# The FIBSUN concept



FIBSUN implements & investigates biomass production & its utilisation in various European value chains.

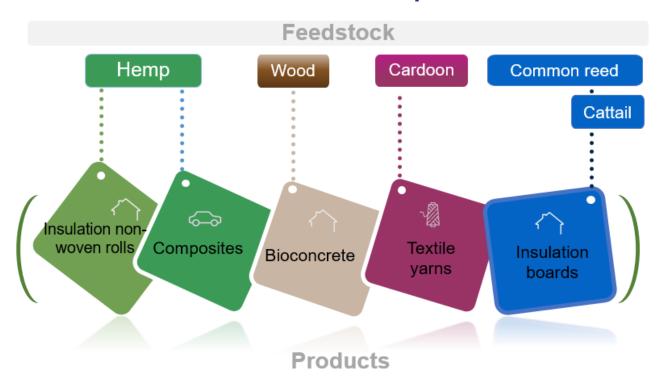








## The FIBSUN concept

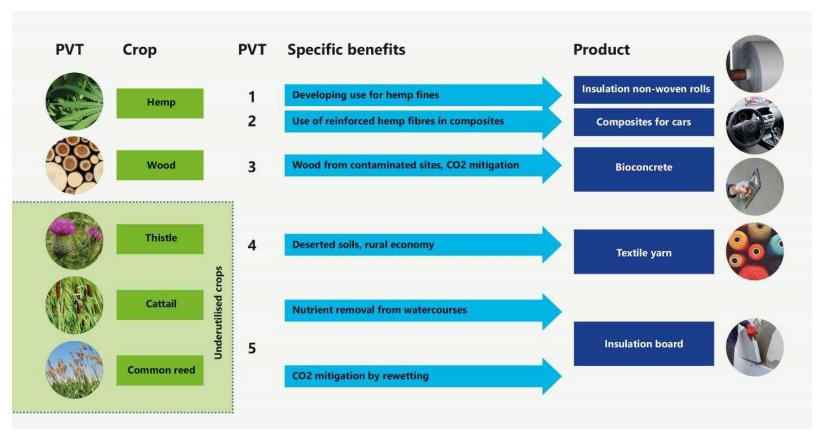
















### **Consortium partners**



[7] RTOs



[7] **SMEs** 



[3] Large Companies









### **Local impacts**

- Improved rural bioeconomy: new income and new jobs
- Generate innovation-based growth
- Create high-quality new knowledge on land use and underexploited biomass
- Transition from a carbon-intensive economy to a low carbon industry by sourcing bio-based materials









#### **Contribution to EU policy**

- European Green Deal: Biodiversity Strategy
- Circular Economy Action Plan
- Sustainable Fibers
- Zero Pollution action plan
- Industrial strategy and Sustainable Product initiative









#### Benefits to society and the environment



Sustainable land use & reduced GHG emissions



Novel fibre-based products for end users



New business models



Increased competitiveness of bio-based sector









# Novel fibre value chains & ecosystem services from sustainable feedstocks



Developing fibre-based products for the construction, automotive and textile sectors



Consortium of 17 partners led by Natural Resources Institute Finland



Use of hemp, wood, thistle, cattail and common reed as feedstock



Optimization of processing technologies: physical, chemical and biotechnological treatments to obtain competitive fibre products



Insulation rolls and boards, composites for cars, bioconcrete and textile yarn



Facilitate provision of sustainable feedstocks for industries and create new valorisation value chains while protecting and restoring degraded soils and biodiversity









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