Dendromass 4 Europe

Securing Sustainable Dendromass Production with Poplar Plantations in European Rural Areas

www.dendromass4europe.eu

9 partners – 7 countries – 5 years – 1 project

D4EU has received funding from the Bio Based Industries Joint Undertaking under the European Union’s Horizon 2020 research and innovation programme under grant agreement 740874.

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Dendromass4Europe aims at establishing sustainable, Short Rotation Coppice (SRC)-based, regional cropping systems for agricultural dendromass production on marginal land. The dendromass produced in SRC (ligneous biomass, bark and wood) will be supplied to dedicated bio-based value chains which will create additional job opportunities in rural areas.

The supply chains will be tailored for optimum efficiency of supply logistics and for reducing CO₂ emissions. Innovative bio-based materials will help to replace fossil-based materials.

**Objectives**

- Establishment and expansion of 2500 ha of short rotation poplar plantations on marginal or on currently unused agricultural land in rural areas
- Demonstration of the market introduction and the application of 4 new Bio-Based Materials (NBBM) linked to the establishment of 4 new bio-based value chains based upon separately adding higher value to the wood and the bark of the poplars
- Reduction of dendromass costs through the adaptation and optimisation of innovative harvesting and storage systems
- Implementation of dedicated monitoring and applied-level research to ensure plantation quality, production stability, optimum poplar variety selection and risk avoidance
- Validation of the expected positive ecological impacts by assessing the life cycles of the NBBMs along the value chains (life cycle assessment)

**New bio-based materials**

The various activities of the D4EU project consortium aim to generate profit for the rural economy on a regional scale through value adding processes and marketing activities that will allow access for innovative biobased materials to specific consumer markets.

As a wood based material, a functionally adapted lightweight board for furniture production is planned.

Three bark based materials, an eco-fungicidal moulded fibre pulp for packaging, a bark enriched wood plastic composite and a wood-plastic granulate are planned.