Dendromass 4 Europe

Securing Sustainable Dendromass Production with Poplar Plantations in European Rural Areas

9 partners – 7 countries – 5 years – 1 project

Partners

- TECHNISCHE UNIVERSITÄT DRESDEN
  www.tu-dresden.de
  Germany
- IKEA INDUSTRY SLOVAKIA S.R.O.
  www.ikea.com
  Slovakia
- PULPACK SP. Z O. O. SP. K.
  www.pulpack.pl
  Poland
- KOMPETENZZENTRUM HOLZ GMBH (WOOD K PLUS)
  www.wood-kplus.at
  Austria
- CONSIGLIO NAZIONALE DELLE RICERCHE – INSTITUTE OF BIOECONOMY (IBE)
  www.ibe.cnr.it
  Italy
- ÖKOForestino KFT.
  9400 Sopron, Ibolya út 11. V/21
  Hungary
- DAPHNE – INSTITUTE OF APPLIED ECOLOGY
  www.daphne.sk
  Slovakia
- ENERGOCHEMICA TRADING A.S.
  www.energochemica.eu
  Slovakia
- SVERIGES LANTBRUKSUNIVERSITET
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Dendromass4Europe

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.
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 bio-based materials to specific consumer markets.

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

Moreover, three bark-based materials are planned: an eco-fungicidal moulded fibre pulp for packaging; bark enriched wood-plastic composite profiles and bark enriched wood-plastic composite granulates.