FiberTies: Nordic network on biobased fibers

How do we use our resources in the most sustainable way? The SNS and NKJ network gathered people from different disciplines to let biobased fibers to enter new areas of exploitation. In the future, the network can be part of the generation of new design and new products.

The focus of the Nordic network FiberTies is to implement knowledge on the use, recycling and reuse of fibrous biomass for industrial application and future products. Wood has been used for building construction, furniture and utensils for innumerable years. The use of wood fibers also has a long history but have the potential, together with other biobased fibers, to enter new areas of exploitation aka the demands for new, sustainable products with new and optimized properties.

The knowledge on fibers in the wood research and the wood processing industry could unquestionably benefit players striving to exploit new types of biomass. Thus sharing knowledge is the key for further progress. For numerous plant-based fibers the research and development is still only at a fundamental level, although the basis for the development of valuable fibrous materials is present. Opportunities are emerging for introducing plant fibers in new areas and constellations previously unthought-of.

The FiberTies network has specifically aimed to look at how to implement and work with biobased fibers and potentially by-products from farming and food production. Resources should be used in a sustainable way and the process of doing so must be economically acceptable. The different stakeholders in that chain – from innovation to market – needs to understand each other and to interact to make the best out of it and to see the opportunities.

The focus of the network was to share knowledge and place focus on sustainable value-added, utilization of plant fibers from the forest and agricultural sectors in building, textile and packaging industry. The use of bioderived textile fibers (cotton, hemp, linen, wool etc.) in products as well as design aspects of production are part of the scope.

Circular economy through recycling and reuse of biobased fibers was also a focus area of the network activities. The FiberTies network aids to contribute to the shift into a sustainable society by creating contact between universities and industry thus helping knowledge transition. The network has brought together Nordic industry partners, universities, designers and research institutes, together with stakeholders from the wood industry, wood research, biomass research, and agricultural.

The network has brought together players from sectors representing the whole value-chain of relevant parties involved in biomass production and processing, design, fiber modification and refining and product manufacturing. Researchers has met processors, architects and designers along with producers.