

**PLASTIX** 



## Staff exchange in the forest-region of Värmland

During some hectic days in May, representatives from Region Fryslan in the Netherlands visited the region of Värmland and the cluster of Paper Province in Sweden. The visit was part of a staff exchange program within the Plastix project.



Representatives from Region Frysland, Region Värmalnd and Paper Province meeting during the staff exchange in May in Värmland.

The focus of the meeting was to deep dive into the innovation system of Värmland – a region covered in 80 % of forest and with a large number of industries around fibre-based materials, for example packaging and building material. The cluster Paper Province, which is the Swedish Plastix project partner, specialises in the forest-based bioeconomy and helps new and established companies to develop and launch sustainable and circular forest-related ideas. The cluster has 120 members and a large collection of partners within the whole value-chain of the forest-based industry, both in Sweden and globally. This industry is also a prioritized area within the smart specialisation strategy of the Värmland region.

Creating more sustainable and circular solutions, requires new products and materials, that are preferably fibre-based. In Värmland there are both established, big actors and a number of smaller and start-up-companies, exploring what the forest can offer. During the days in Värmland, the Fryslan delegation was invited to take part of and meet a number of actors, involved in fibre-based innovation. Kajsa Fougner from the start-up Biosorbe gave insights from biobased innovation. Part of their production is making absorbents for cleaning water and air out of tree fibre-pulp.





For a start-up, as well as all other companies and other actors, a strong innovation system is important. In Värmland, there are a number of industrial clusters, science parks, incubators, testbeds, research institutes, funding platforms, as well as a strong university - all contributing to the process of smart specialisation, and to the prioritised areas of Värmland. This collaborative arena has among, other things, led to innovation and new uses for forest raw materials, and development of test beds of for example fibre-based and large scale 3D-printing, as well as development of the businesses as a whole.

Some of these innovations also come from research. A number of researchers from Karlstad University and from Örebro University, also presented their work on biobased plastics, biobased coating for packaging material and sustainable packaging. Maria Sandberg at Karlstad University, is working with development of forest based bio plastics - PHA - where waste from the forest and paper industry can potentially be used to produce fossil-free plastics. Yet, to reach large-scale production of and commercialisation for this innovation, a lot more is needed, such as financing and partners.



Building regional innovation depends on strong relationships between the actors of the innovation ecosystem, according to Eamonn Mccallion (from Grants and Innovation office at Karlstad University), who presented the Academy for Smart specialisation. Shared strategies, narratives and values are essential. Dag Hallén, Katarina Nordmark and Angelica Jacobo from Region Värmland also presented and discussed the value of a clear regional strategy and goals such as focus on the forest bio-economy and on circular economy. And of course of collaboration between many actors of the innovation system.

All in all, the days in Värmland gave possibilities to deep-dive into the forest bio-economy of Värmland and its innovation ecosystem. All very interesting and a lot of food for thought regarding policies for circularity and plastics.

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