

Call for a master thesis:

Assessing economic and environmental impacts of pulp and paper biorefinery innovations –

Investigation on new products and potential market
entry points

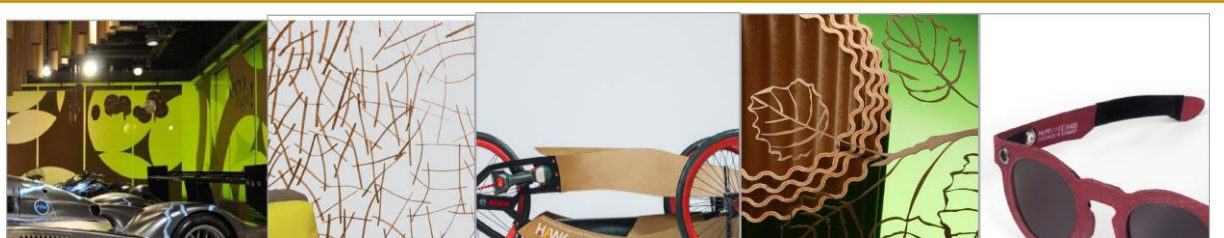
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Application: By the end of April 2018 **Duration:** Mai/Jun 2018 – Oct/Nov 2018

Background:

Sustainable production of biogenic resources and their conversion into value-added products play a significant role when it comes to reducing the dependence on fossil fuels and at fostering regional value creation.

The pulp and paper industry, as the oldest non-food biorefinery on industrial scale, is a key player in moving towards a knowledge-based bio-economy. Development of value-added processes and products from wood-based biomass in the course of a PPP-project (Competence Centers for Excellent Technologies) shall lead to a more efficient use of raw materials and to a partial replacement of mineral-oil-based products.



Exemplary illustration of an innovative versatile material consisting of 100 % softwood cellulose (source: www.kraftplex.com)

Goal of the thesis:

After efficient separation of the shortest fiber fractions (fines) from process streams of pulp mills, a new raw material with specific advantageous properties and a high potential of partly replacing fossil-based compounds is at hand. Some promising applications and their business surroundings will be investigated to provide a sound basis for further decision-making within the project. For instance, application selection could be tackled with the help of a multi-perspective application selection decision scheme (MPAS method).

Expected results:

The results of this thesis should help the project partners from the Austrian pulp and paper industry in their decision-making by providing them with valuable information on promising applications produced from fines, on their embedding in a business context and on potential market entry points.

Methods:

E.g. literature research, interviews, survey, multi-criteria decision-making methods (MPAS,..)