

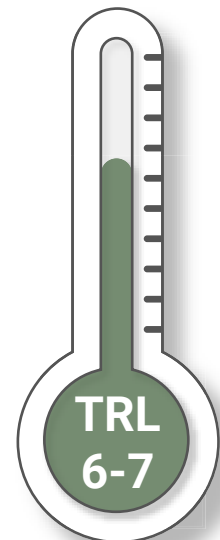
GO-GRASS

04
PRACTICE
ABSTRACT

Grass cellulose fibres



Technology
readiness level:



Target group

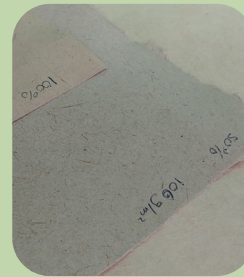
Schut papier, other paper factories, users of fibre material (pots for growing flowers, vegetables etc). Sustainability-minded customers, most likely for graphical and packaging applications.

Benefits and impact

Together with Schut papier, HB and ACRRES are conducting large scale tests to produce paper with different percentages of substitution of wood cellulose, turning a low/waste quality grass product into a high value paper or carton product.

Description

The goal is to make paper from grass sourced fibres with as much as possible substitution of wood-based cellulose. The Dutch demonstration site aims to produce a more sustainable fibre to be used as ingredient for paper by using a low-quality feedstock as a fibre source, such as roadside grass.



Watch the
demosite video



Challenges

Currently, almost all paper is produced from either virgin wood-based cellulose or recycled paper. The Dutch demo site aims to source raw materials locally by sourcing cellulose from grass, thus reducing the need to import cellulose and cutting of trees. While dry grass particles are already used as a raw material occasionally at Schut Papier, it is merely added as a decorative 'filler' to the paper pulp. It does not 'bond' with the other fibres like cellulose and is still coloured.

Solution

The demonstration site developed cellulose fibres that have enough strength and a good dewatering capacity at the same time allowing an economic feasible large scale paper production. When this is not feasible still niche markets remain. Preferably the produced bio-based paper and packaging products should allow a high appeal to buyers and a reduced carbon footprint.

Team and contact

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