WANDERFUL .STREAM | Interreg Euregio Meuse-Rhine | EUROPEAN UNION

IMPACT REPORT

// RECYTEX

INTRODUCTION

TThis report presents the results of one of the innovation tracks carried out by the teams of the European Interreg project Wanderful.stream (2020-2023). In this project, seven partners from the Euregio Meuse-Rhine have pooled their knowledge, strengths and resources to jointly support small and medium-sized enterprises in their transition to a circular economy.

Wanderful.stream offers companies free advice and guidance on the recovery of their residual flows; it also initiates and facilitates the co-creation of circular solutions with experts in technology, design and business development in the framework of innovation tracks.

This report focuses on the results of the innovation track of the company Recytex.

INNOVATION TEAM

DESIGN
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BUSINESS DEVELOPMENT
Pauline Pötgens et Sarah Frenck (EKLO)

COORDINATION
Pauline Pötgens et Sarah Frenck (EKLO)
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RECYTEX

RECYTEX EUROPE has more than 30 years of experience in collecting and sorting post-consumer textiles. Their plant based in Seraing (Belgium) processes 30 tons of textiles per day, which amounts to approximately 10,000 tons per year. RECYTEX organizes the sorting of textiles in different stages and send the garments that are still in good condition to be sold via their own network of second-hand stores called Jipex.

The textile waste, once collected, is sorted into separate streams, depending on different recycling techniques. This sorting is done by hand and mostly by colors, not by materials. It is therefore crucial to update the current way for sorting and recycling post-consumers textiles waste as 73% still end up in landfill or incineration.

In order to reduce that percentage, RECYTEX has the ambition to fully automate the the textile sorting process thanks to spectroscopy technologies that allow sorting by fiber types as well as colors. Their R&D center, based in Lyon, is currently working on various research areas such as structuring the professional clothing sector, developing sorting tools for recycling in short circuits and creating new sectors for the recovery of textiles at the end of their life.

Recytex wanted to participate in the Wanderful.stream project in order to find innovative solutions and local partners for the recycling of specific textile waste. As stated earlier, a significant proportion of textile waste still cannot be recycled: a part is exported to Asia to be transformed into very-low value products (by a very low cost labor force) while the other part part is sent to landfill or incineration. These operations represent a considerable economic, environmental and social cost.

The innovation track focused on the analysis of the various post-consumer textile streams and in particular the exploration of local valorization solutions for streams that cannot be recycled in second-hand stores.

30 tons of textiles per day

01. Exploring local ways of recovering post-consumer textile waste

02. Categorization of textile wastes that are the most difficult to recycle

03. Creating business opportunities by processing post-consumer textiles at a local level

INNOVATION PROCESS

The mission of the project team was to find solutions to locally valorize specific types of textile waste and test their technical and economical feasibility. The team first analyzed the stream (materials, quantities, frequency). Based on these factors, the team was able to identify relevant stakeholders (local and foreign) to conduct qualitative interviews.

STEP 1

Analysis of the textile streams

The analysis of the stream helped to highlight the materials/products with the highest added value and which flows were constant. The team then looked more specifically at the characteristics of these materials/garments to identify the stakeholders who could need those to include in their manufacturing process, especcially the plastic sector where the need for raw materials is dire.

STEP 2

Connecting with local and foreign stakeholders

Several qualitative interviews were conducted in order to better orientate the choice of the stream for which a local recycling path would be possible.

STEP 3

Exploration concrète d'une piste

Following the various interviews, the team will now work on exploring thoroughly the feasibility of a local partnership (ongoing).

RESULTS

By working on the waste stream characterization, the project team has highlighted specific streams with higher added value. It has also established the steps in the value chain that are necessary for the revalorization of post-consumer textiles (sorting, storage, dismantling, sanitation/cleaning, processing...)

The meeting with different actors has highlighted how to ease the identification of avenues to be explored in greater depth and therefore the direction that the track will take.

The project is still in progress.

Interreg
Euregio Meuse-Rhine
European Regional Development Fund

EUROPEAN UNION

Interreg EMR transcends borders by enabling collaboration between regional areas in different countries. We are investing in projects on innovation, the economy, social inclusion and training, and territorial cohesion. By encouraging cross-border collaboration, we strengthen the economic and social fabric in the border region between Belgium, Germany, and the Netherlands.

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WANDERFUL .STREAM

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EUROPESE UNIE

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