# Sächsisches Textilforschungsinstitut e.V.

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## Waste to Wetlaid – Development of functional wet nonwovens from textile short fiber waste


Kofinanziert von der Europäischen Union

Diese Maßnahme wird mitfinanziert durch Steuermittel auf der Grundlage des vom Sächsischen Landtag beschlossenen Haushaltes.


### Problem / Motivation

- As a result of current volumes in production and consumption of textile materials, the increasing amount of waste represents a significant ecological problem due to the lack of end-of-life solutions
- The textile industry is striving to recycle large amounts of textile short fiber waste, but the implementation primarily fails due to the technical/technological requirements
- The aim of the project is to process prepared short textile fibers (< 12 mm) using the wetlaid process to develop wet nonwovens or functional layers for nonwoven composites

### Solution

- Fiber waste characterization with regard to its composition and length distribution
- Processing into wet nonwovens adapted to different requirement profiles
- Focus on specific fiber orientation, low thickness and high uniformity with low mass per unit area
- Use of recycled non-textile fibers (e.g. silicate; carbon; glass) for technical applications
- Development of functional layers for innovative composite structures

### Project Launch

09/2025

### Project Partner

Available for inquiries

*Wet fleece technology center at STFI: Production of short fiber nonwovens*


### Acknowledgement

*The SAB project Waste to Wetlaid (WtW) (Reg.-Nr. 100758119) was funded by the European Regional Development Fund (ERDF) and the Free State of Saxony.*



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