

Do you want to contribute towards a sustainable circular system of textiles in the Nordic region by applying SCM knowledge?

The Swedish National Road and Transport Research Institute (VTI) and Chalmers Industriteknik (CIT) are looking for master students that want to perform their master thesis within the recently started project "SATIN". The project consists of 21 project members from different phases of the textile circular system in Nordic countries (e.g. Nudie Jeans, Convert, Röda korset, Better World Fashion, Balder, DHL, Kruse Vaskeri, Göteborgsregionen, UFF).

Background and purpose of SATIN

The consumption of clothes and home textiles in the Nordic countries are increasing and at the same time more textiles are thrown away in the household waste. This means a huge material loss since the textile that has not been separately collected is incinerated, even though most of it could have been reused or recycled. Given that the textile industry is one of the most polluting industries in the world, there are louder appeals to address its environmental challenge.

SATIN aims to develop and test solutions that can address the textile collection and sorting challenges. More specifically, the project will develop cost-efficient collection solutions that achieve an increased collection rate by stimulating consumers to hand in their used textiles. Also, SATIN will develop circular network design solutions by investigating and evaluating the opportunities for using centralized resources and infrastructure in the Nordic region to achieve economies of scale. A systematic map of the market for recycled raw material and reused textiles will be created to identify the potential for new business opportunities.

Working activities as a master student

As master students you will be part of the project team and work closely with the researcher group (consisting of VTI, CIT, Aalto university in Finland, Aalborg university in Denmark and NTNU in Norway). You will help in the mapping and evaluation of the textiles circular systems with focus on Sweden. This includes:

- Literature review and interviews with stakeholders to identify and describe the current systems: What are the current systems for dealing with used textiles, involved resources and their capacities? Which collection methods are used and how do they perform? How does the demand look like for used textiles? What are the challenges and opportunities in the circular systems?
- Collect quantitative data to estimate volumes of used textiles: What are the volumes of different used textile flows? What are the potential future volumes (2025 and 2030)?
- Evaluate the current circular system with the increased volumes of the future: How does supply and demand meet in the system? What are the constraints, bottlenecks, and challenges in current way of dealing with used textiles? Business opportunities for dealing with collected and sorted textiles?

Contact us!

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