



Henning Wehland

I'm a very curious guy by nature. That's why I offered to help out at a well-known hot dog station in Münster (Germany) this year, to draw attention to the shortage of staff in the gastronomy. I wrote an article about it on LinkedIn, which was in turn reacted to by Ines Chucholowius.

From her profile, I could see that she is a consultant for strategic marketing and communication in the textile industry. Not entirely serious, she offered me a job in her office. Like pushing a button, the pictures in my mind set in: Textile industry, exciting! Merchandising, contacts in the industry, collaborations, and I agreed to a short chat, at the end of which we spoke on the phone and arranged to meet.



Ines Chucholowius

She told me about her website TEXTINATION.de. And we were already involved in an exciting, heated exchange about perception and truth in the textile industry. Without further ado, we left it at that and I went home with a chunk of new information about an exciting field. Our dialogue on social media continued and eventually Ines offered me the chance to feed my die-hard curiosity with the support of TEXTINATION.de. I could write a blog on the site, about people, products, service providers, producers, startups or trends that interest me, to add to my half-knowledge about the textile industry.





Facts & Figures: The Company

Interview partner



Robert Kapferer
 Degree in Industrial Engineering
 (Mechanical Engineering); TU Darmstadt
 since 2021 Managing director Circularity Germany
 GmbH i. G. (in foundation)
 2012 – 2021 Managing director AVECO Material
 and Service GmbH & Co. KG

Company

Founded 2021
 Start-up phase (Foundation and market launch)
 German part of the Dutch group Circularity B.V.

Location

Circularity Germany: Hamburg
 Circularity B.V. Netherlands: Etten Leur
 [largest shareholder of Circularity Germany]

Employees

Circularity Germany: 2
 Circularity B. V.: approx. 10

Website

<https://circularity-works.com/en/circular-clothing-and-textiles/>

Memberships / Certifications

- Partnership for Sustainable Textiles
- Products are certified according to the Global Recycling Standard GRS, the yarns are TÜV tested

Vision

Bringing clothing industry production back to Europe:
 Transforming global value chains back into regional value chains

Production form

- Mechanical recycling of textile post-consumer waste
- Mechanical recycling of production waste and offcuts (pre-consumer waste)
- Spinning: Yarn production (Blended yarns: cotton & polyester)
- Knitting

Production locations

- Etten Leur, Netherlands
- Tirupur, India
- Ghana, Sub-Saharan Africa

Products on the market

- Production focus: T-Shirts, polo shirts and sweatshirts.
- Textile tote bags for promotion and merchandising

Business purpose / Target groups

B2B
 ▪ Workwear/Corporate Wear
 Utilization of discarded workwear of a supplier in order to produce new garments from it again for the same client

	<ul style="list-style-type: none"> Startups/ fashion brands/ textile retail Productions for startups, brands and retailers who want to add sustainable products to their collection <p>B2C</p> <ul style="list-style-type: none"> Online store for streetwear
Projects	<ul style="list-style-type: none"> Utilization of discarded clothing of the Dutch armed forces for the production of new T-shirts and sweatshirts Pilot project/ wear test with Berlin police (T-shirts and sweatshirts)
Achieved goals	<ul style="list-style-type: none"> Mechanical recycling of post-consumer waste, yarn spinning, shirt production without additional dyeing of the yard goods. Production facility in the Netherlands for mechanical recycling, spinning, knitting/warp-knitting and converting (beginning in 2023) Import of 100% recycled shirts from pre-consumer-waste from the partner facility in Tirupur/ India
This is what is being worked on	<ul style="list-style-type: none"> Weaving and felt production Dyeing through largely waterless new technologies Extension of market access to D/ A/ CH (Germany, Austria and Switzerland) Addressing public sector clients Create awareness to increase the share of recycled clothing and promote this in institutional procurement as well, if the specific intended use allows for it Integration of new dyeing processes and reduction of the proportion of white industrial waste that previously made certain dyeing possible Blue Angel for Textiles Certification Improving the purely manual sorting of waste by using AI-assisted methods in the future



Textile waste into the front ... new T-shirt out the back



Henning Wehland

During this exchange and a long brainstorming session, certain terms kept tickling my attention:

Circular economy, recycling, recyclable material loops. Circular Economy, Recycling, Recyclables. Even though there are many different definitions and some even distinguishing between different aspects: the former thought from waste that flows back into production as a secondary raw material, a more modern approach avoiding waste already in production - the general consensus is really only that circular economy is a cycle in which waste is used as a source for something new.

Sounds like useful additions for all areas of the manufacturing real economy to me. Ines introduced me to Robert Kapferer: He runs a startup called Circularity Germany in Hamburg. His company, founded in 2021 and consisting of Robert and another partner, is an offshoot of the Dutch-based company Circularity B.V. Its founder Han Hamers, with a degree in child psychology and a professional background in the textile dyeing industry, had the idea five years ago for a production facility that spins new yarn exclusively from textile production waste and old textiles turning it into T-shirts, polo shirts and sweatshirts.

Whether this works, and if so, how, is what I wanted to find out, and Ines and I arranged to meet Robert for a 90-minute online conference.

Robert, originally an industrial engineer, comes from a less sustainable industry. He worked for 11 years as managing director for AVECO Material und Service GmbH, where he was responsible for the workwear of more than 50,000 employees.

At the beginning of our conversation, he emphasizes that a moment in January 2021 changed his life and from then on, he wanted to dedicate himself to the topic of circular economy with all his might. That was when he met Han Hamers, who inspired him to found Circularity Germany. His enthusiasm and passion for the subject sound credible, and he begins to describe the differences between chemical and mechanical recycling methods. In summary, the mechanical process of shredding and the subsequent spinning shortens the fibers and thus restricts their properties for further processing. The advantage lies primarily in the comparatively uncomplicated, fast and more cost-efficient process. In the chemical variant, chemical waste remains, but the processed materials are broken down again into their basic building blocks in such a way that they have almost all the same properties as a so-called virgin raw material. Circularity Germany stands for the mechanical process

And then comes the sentence that gets all our attention: "We've advanced a spinning technology so much that it relies exclusively on waste-based raw materials."

This sentence almost doesn't stand out because Robert still talks - quite excitingly - about the fact that they are planning a production and manufacturing facility where everything from knitting yarn to relatively fine thread can be spun and then further processed into fabric. And here Ines and I ask intensively: Essential requirements for industrial production still seem to be unresolved, and necessary processes are still in the planning stage. For example, the question of whether to work with pre-consumer or post-consumer waste. Pre-consumer waste is cutting waste from the production of clothes, which corresponds to about 10% of the processed material. Post-consumer waste we know as used textiles.

As long as production still takes place in India, Circularity currently uses mainly pre-consumer waste. These come exclusively from sewing factories in the Tirupur region in the south of India. When using used textiles,

which exist in large quantities in Germany (according to a study, 28-40% of all garments produced are thrown away unworn), Circularity produces blended yarns of cotton and polyester. The company does not offer pure cotton yarns.

Textiles are treated with chemicals to varying degrees - workwear in particular cannot do without them. The fact that Han Hemers is also collecting used textile stocks from the Dutch army in order to reintroduce them renewed into the consumer cycle is therefore not reassuring. Military clothing has to be finished with all kinds of additives.

Therefore I ask how he can dispel doubts in a consumer's mind like mine, with a healthy half-knowledge of mask deals and greenwashing, that a well-intentioned vision will be followed by a dark awakening. This concern cannot yet be resolved after the conversation

We limit ourselves to what is planned: Robert has the dream of reversing the globalized process of textile production. He wants to end the decoupling of cotton growing regions and far-flung production such as Asia with subsequent shipping of ready-made goods to Europe. In the future, existing used textiles and/or cutting wastes are to be collected on site, recycled and processed locally into new textiles.

I believe him in having this dream. However, some of my questions about sustainability remain unanswered - which is why I have my doubts about whether the idea is currently capable of performing and competing.

What are the reasons for this? For one thing, I think it's always difficult to do necessary pioneering work. Especially when listening to smart comments at the regulars' table that large companies are already working intensively on the principle of circular economy. But sometimes, apart from the term "circular economy" and a vague commitment to it, not much remains.

Circularity Germany is committed to developing a technology based exclusively on waste. The interview points out that this also includes making production more environmentally friendly and eliminating transport routes, which further reduces the burden on the environment. When all the requirements for realizing this dream have been met and a product that is competitive in terms of both quality and price can be launched on the market, it is up to the consumer to decide. Here one would have the credible argument of sustainability and a socially and environmentally fair process. Circularity would then not have to worry about PR.

It needs to be given time and, above all, attention. But perhaps the industry should get involved right here and now, and invest in startups like this and make sure that problems are cleared out of the way. Because one thing has become clear to us in this conversation:

It could all be so simple. Circular economy is achievable, but the road there is still costly and rocky. That's why we wish Robert and his team every success and, above all, perseverance. Thank you for the interview.

*Henning Wehland
Ines Chucholowius
Source: Textination*