FIELD NOTES FROM THE TEXTILE INDUSTRY · CONFERENCE REPORT

Functional Fabric Fair Expert Talks

FUNCTIONAL FABRIC FAIR · PORTLAND · OCTOBER 27–28, 2026

The level of expert talks at the Functional Fabric Fair, FFF were full of high caliber experts including deep dives into topics ranging from how to streamline product development, AI, DPP to Anti-Microbial finishes and Next-Generation Materials.



COURTNEY CANEER-WILLIAMS
Consultant, Gherzi Americas

These are the top mentions from the sessions I attended with the overriding theme around new innovation commercialization and regulatory changes on the horizon.

With a key mention to quote Ruth Kelly, Weft x Warp call to action that we must “SHIFT from VOLUME-DRIVEN GROWTH to VALUE-DRIVEN DESIGN”.

Roadmap to Bio-Based Materials Adoption

The most inspiring discussion was the topic *Roadmap to Adoption: Bio-Based Materials* with REI - Ajay Chadha, Director, Advance Materials Innovation & Hyosung - Laura Nilo Marketing West Coast Lead.

With the industry transition focus from fossil-based petroleum inputs with renewable plant-based resource, Hyosung produces **regen™ BIO Spandex** (also known under the creora® bio-based line) their main focus promoting that their bio-based spandex is now at scale. The annual capacity is at 50k metric tons with a $1 billion investment plan to scale up annual capacity in phases to 200k metric tons based on market demand.

REI talking points were around the adoption of next generation materials regen™ along with Cyclone and Ambercycle collaborations. These adoptions are workable for REI because they have available capacity to deliver on volume versus other next gen materials which have yet to be at scale. Why does it take brands so long to adopt new material innovation? #1 scale needs to be ready and #2 bulk production price needs to make sense.

The inspiring take away message we were left with from REI’s Director was:

> ***“Sustainability cannot scale as a luxury tax. We must engineer the business case.”***
> — Ajay Chadha

>Engineer = solves the physical trade-off and
>Business Case = solves the cost trade-off

Given the market focus of mono-textiles for ease of recyclability with the difficulty of recycling spandex in both mechanical and chemical processes, there is still work to be done in mechanical stretch yarns or other fabric constructions to limit use of spandex all together; of course depending on the end use application. One innovation to mention in mono fiber stretch wovens is the Unspun 3D weave though can still only achieve between 10-15% stretch.

Antimicrobial Finishes and Regulation

The panel discussion “Stop The Stink. Navigating Legal and Regulatory Landscape in AM’s to Meet The New Switching Window” covered the pending regulatory requirements that will change the use of silver specifically and anti-microbial claims. Approx 80% of all microbial finishes are silver based and QACs: Quaternary Ammonium Compounds the question is when the shift to biobased AM will become available commercially, this is still unknown. The 2028 EU Stewardship Deadline is the pending requirements around the European Union EPR textile rules end-of-life silver release becomes a key regulatory criterion. The market opportunity is open when it comes to the language of claims as odor is unregulated - best messaging is to focus on the consumer benefit, ie. Walmart changed all their claims to Anti-Odor vs. Anti-Microbial.

The US Apparel Antimicrobial Market = 16% of the total apparel market in 2025 = $366B with AM/ AB/ AO performance textiles = $60.5B total addressable market of US retail apparel. The current AM treatment technology split = 81%, QAC/Organic = 19%, Other = 20%.

I asked about what are the next bio-based materials? Would it be a focus on chitosan, or higher blends of wool…or other potential innovations…? Of course these factors increase the cost, so here is another opportunity of bio-based performance innovation that is waiting to be discovered!

Bio-Based Reality / Circularity - Can Renewable Materials Make Circular Design Easier?

A discussion from industry independent experts across the supply chain. Photo (from right to left)

Davide Ballico, DB ORAMA Consultancy, Inc.

Ruth Kelly, Weft X Warp — University of Durham; creative in fashion

Ludovic Duran, LD ACE Consulting

Neil Bell, the Future of Textiles

These experts with their own focus areas all have clients asking for support in sourcing bio-based textiles and recommending the best materials that will make the transition to adopting a circularity design process.

The question discussed was if we design to last, is it designed to be loved? And how do we continue with the capitalist consumer model we are all so used to drive corporate value? This can be done with subscription based programs and the adoption of circular systems.



The Circular Economy Butterfly Diagram

The University of Manchester provided a great visual for how we will make the circular economy work by the following Butterfly Diagram. The source is adapted from EMF 2015, so the circularity of course is not a new concept. Nature is a circular system - there is no waste - and the bi-product, off-gassing, of material breaking down is inputted back for energy use.

Overall conclusion of the talk is yes - renewable materials as more and more become scaled, provide easier implementation of circularity. Onwards!

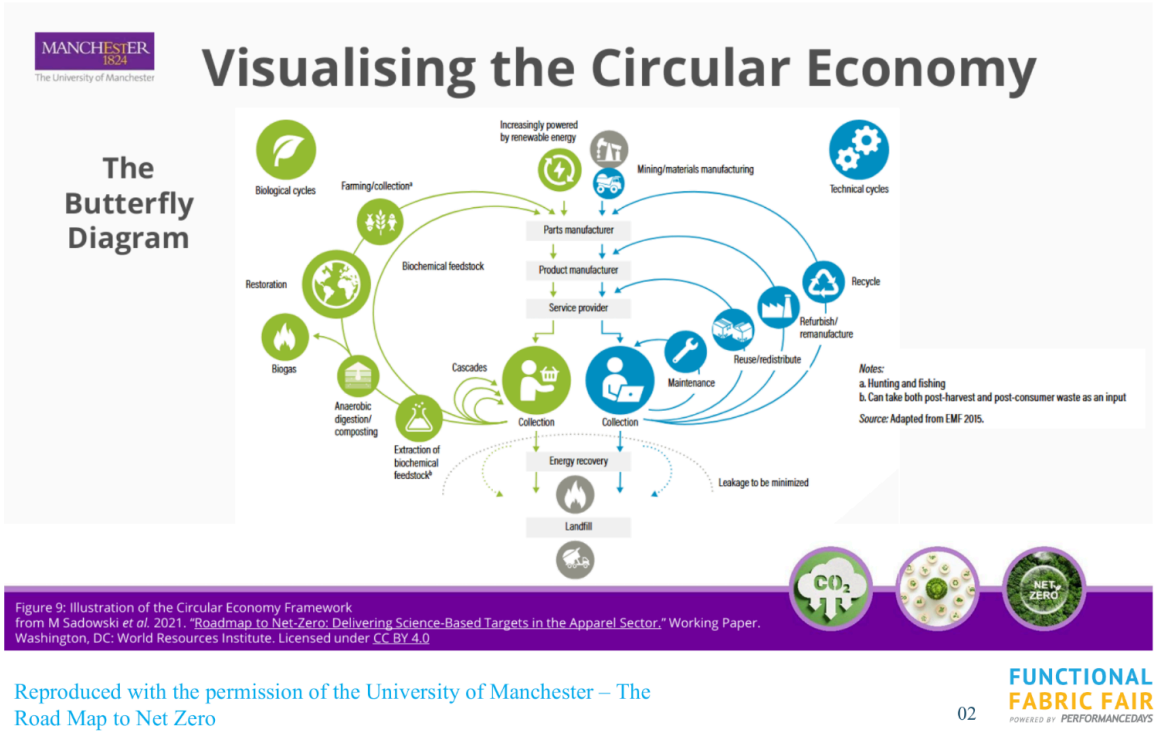
Resources

University of Manchester · Net Zero Textiles

Ellen MacArthur Foundation

Rethink Global

Canopy Planet



There are too many great nuggets of wisdom to relay in one article so connect with me for a more deep dive into which subject you want to dive into more.

In other circularity news…

Circulose announced the restart of its commercial-scale textile recycling plant in Sweden, more than two years after its former owner, Renewcell, filed for bankruptcy. Under new ownership, Circulose secured purchasing commitments from 16 fashion brands before restarting production, giving the company greater certainty that demand for its recycled material will support commercial-scale operations.

Following its 10-year supply deal with Samsara Eco, Lululemon launched two of its core running shorts with the Australian recycler's enzymatically recycled polyester. The Hotty Hot and Pace Breaker shorts are available in a limited run in Australia and New Zealand, with the material accounting for at least half of each pair's weight.