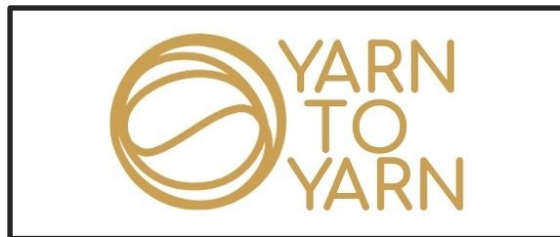


18.-20. | **Zukunftsforum**
OKT. | **Nachhaltige Textilien**
2021
Kerenzerberg | «Agenda 2030 im Textilsektor»

Input

Biologisch Molekular-Recycling – Yarn-to-Yarn

Sandra Grimmer





YARN-TO-YARN[®]

Molecular Textile Recycling

Enzyme für eine
Zukunft ohne
Fashion Waste



Vigilada Mineducación

CIBIOT

Center of Studies and Research in
Biotechnology of the UPB University
Medellin, Colombia





VOGUE

RUNWAY

The Future of Fashion Is Circular: Why the 2020s Will Be About Making New Clothes Out of Old Ones

GLOBAL FASHION: GREEN IS THE NEW BLACK

Fashion is a multi-trillion dollar industry. But it is also one of the world's most polluting sectors, on course to consume 25% of the world's carbon budget by 2050. An urgent rethink of the industry's 'take-make-dispose' model is needed, with the potential to unlock billions of dollars of value across the supply chain.

Barclays Investmentbank, 14 May 2020



MISCHTEXTILIEN SIND ÜBERALL, NUR NICHT IM KREISLAUF.

Auf dem Markt gibt es noch keine Lösung um synthetische Mischtextilien mit Elasthan zu recirculieren.



BIOLOGISCHER KREISLAUF



Biodegradable

TECHNISCHER KREISLAUF

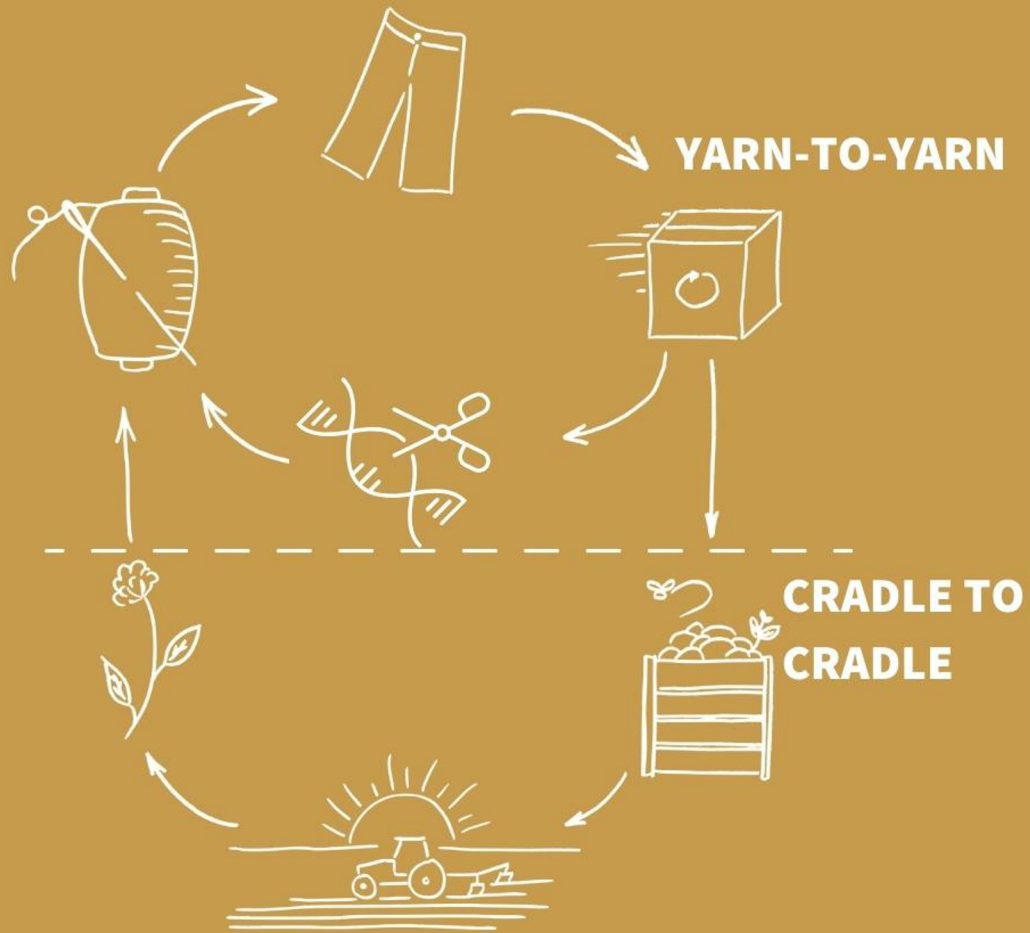


Mechanisch
Chemisch
Thermo-Umwandlung

BIO-CYCLING = BIO-TECH CIRCLE



Molekular Recycling
Enzymatische Hydrolyse



KREISLAUF OHNE UMWEG ÜBER DEN KOMPOST

YARN-TO-YARN MOLEKULAR RECYCLING

Enzymatische Hydrolyse

INPUT

Viscose / Cotton



Elastane



Polyamide



OUTPUT

Yarn-to-Yarn
Glucose Syrup

Yarn-to-Yarn
Elastane
Pre-Polymer

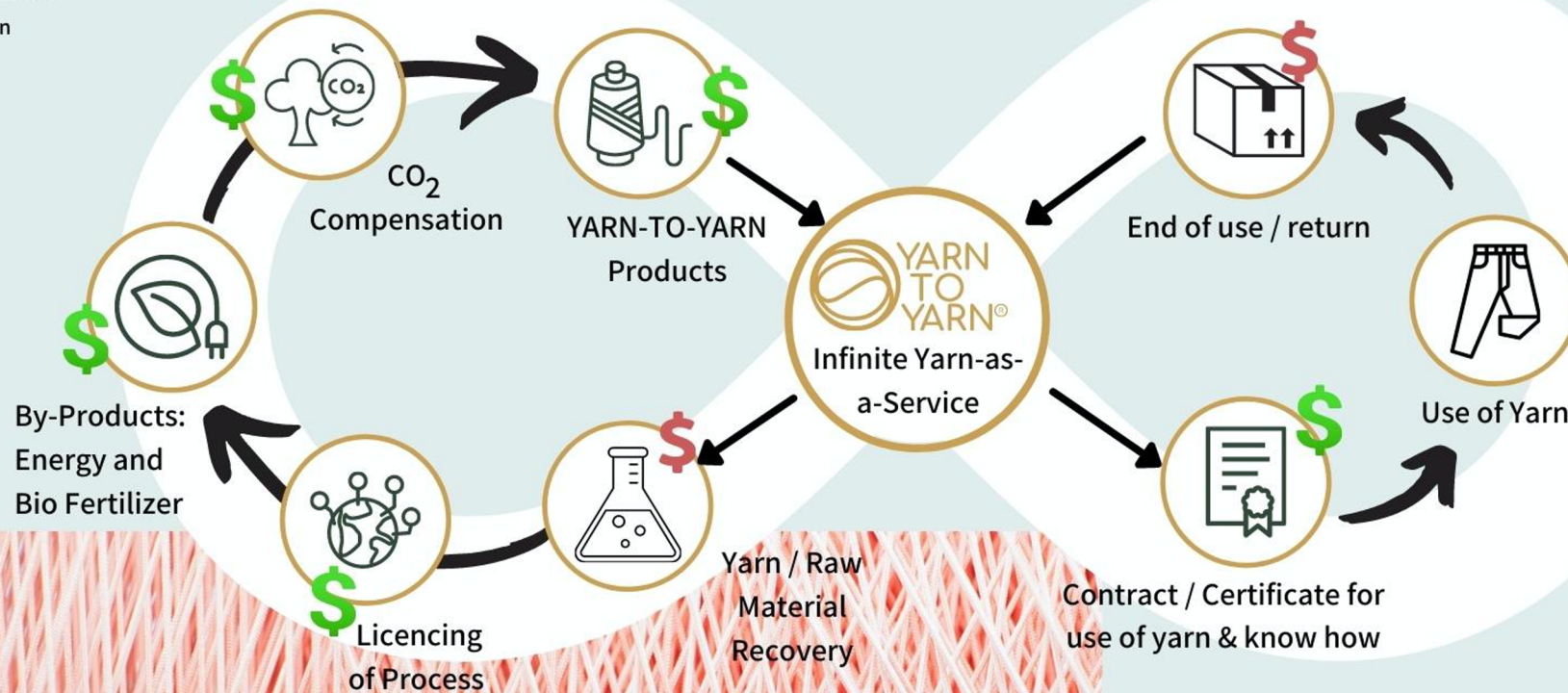
Yarn-to-Yarn
Polyamid



CIRCULAR BUSINESS MODEL

Wertschöpfung und -erhaltung mit "Infinite Yarn-as-a-Service"

💰 Einnahmen
💸 Kosten



PROCESS & VALUE CHAIN

CORE TECHNOLOGY:
Enzymatische Regeneration
von synthetischen
Mischtextilien



VERIFICATION LAB:



USE CASE: SEEFELD PANTS



 Lot: 01-100-202103 

Rohstoff Inventar

Stoff: 60% Viskose | 35% Polyamid | 5% Elasthan
Faden: Polyamid | Knöpfe, Etiketten: Polyester
Reissverschluss: Polyester & Zink

Diese Hose besteht aus 100% re-zirkulierbarem Rohstoff. Diesen nehmen wir am Hosenlebensende zurück, damit daraus Garn für neue Hosen entstehen kann. Mehr dazu: YARN-TO-YARN.org

#StopWasteNotFashion

 Im Schonwaschgang mit reduzierter Schleuderrzahl waschen. Keinen Weichspüler verwenden. Nicht tumbeln.



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**ALDO NÄGELI
STRICKEREI**



Innosuisse - Swiss Innovation Agency
 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



YARN-TO-YARN TEAM



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fermentation, organic extraction,
process control and development
of high value-added raw
materials.

DANKESCHÖN



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