

Recycled Content & Vegan Content Verification

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FDRA Product Safety Working Group
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Mehr Vertrauen.**

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Inspire trust.**

About the presenter



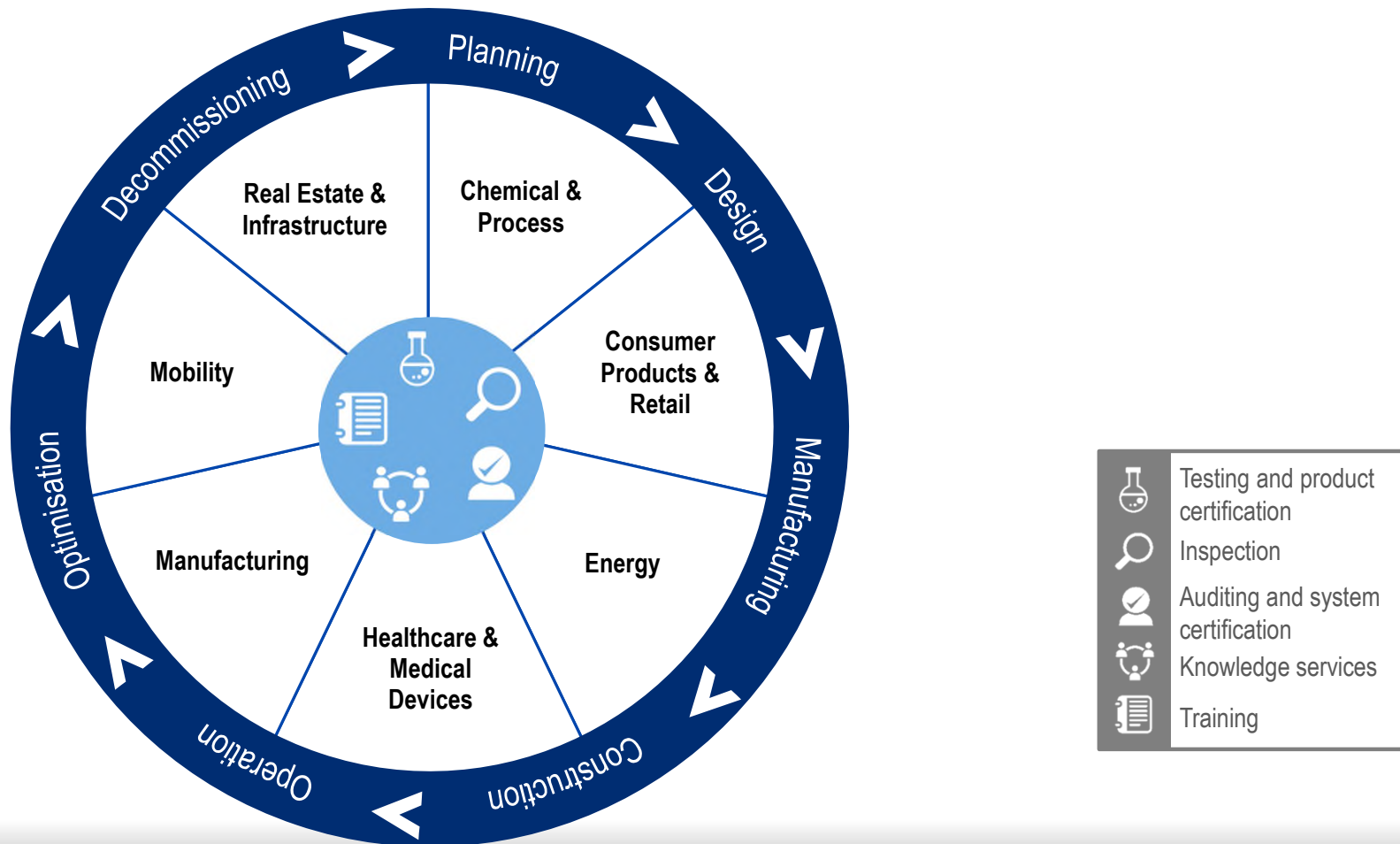
Sandeep Khatua, *Global Technical Director at TÜV SÜD*

Sandeep is a Product Safety and Business Development Executive in the Consumer Goods Industry. Currently, he is a Global Technical Director with TÜV SÜD where he provides technical leadership to the entire soft lines and hardlines business dealing with North American customers. Sandeep brings 20 plus years of experience leading technical systems improvements, product, and business development activities within diverse industries such as apparel, home goods, footwear, and accessories.

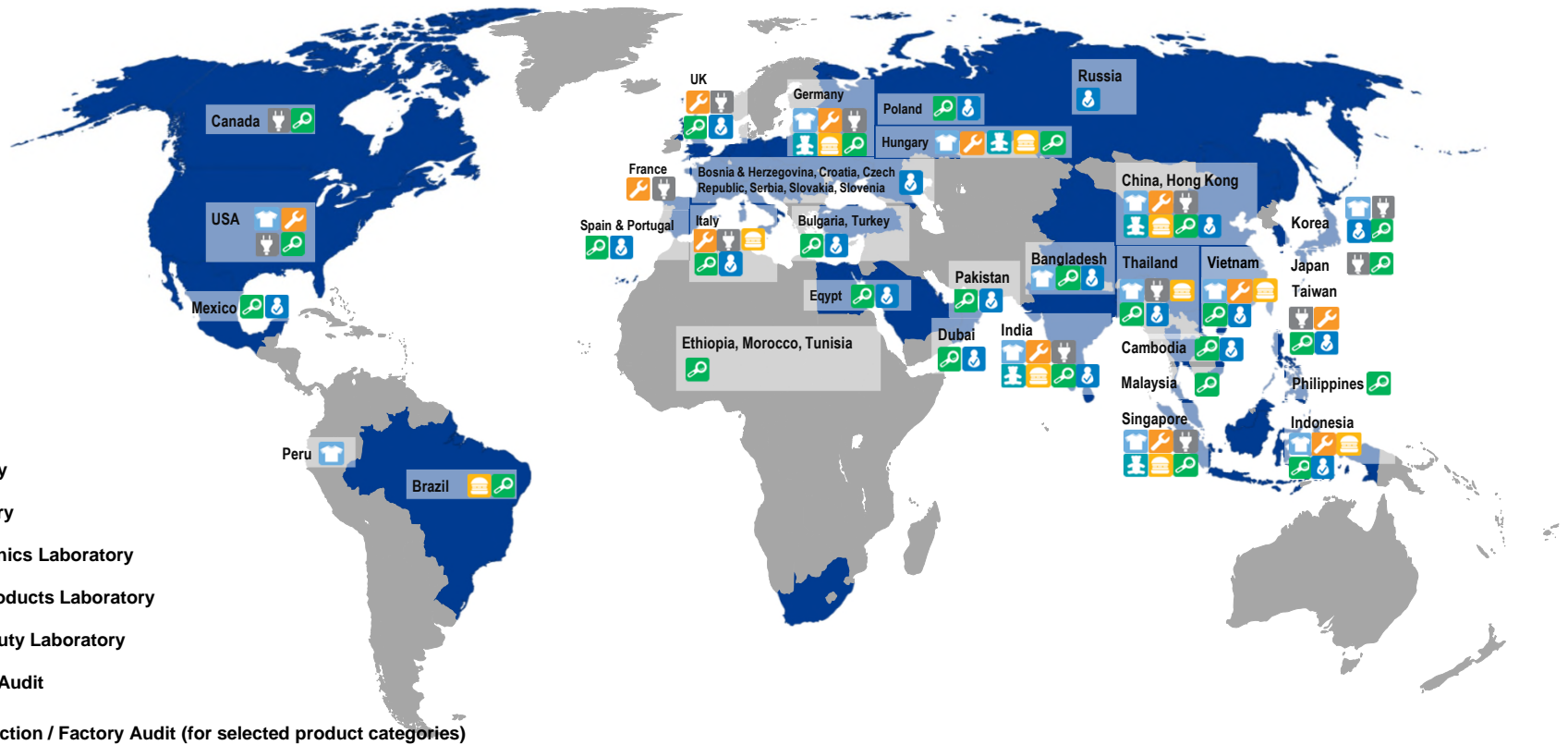
Prior to joining TÜV SÜD, he worked with Carter's Inc. as a Senior Manager of Product Integrity and Compliance. Prior to that, he was with Bureau Veritas Consumer Products services as Director of Softlines technical services.

Sandeep received his Bachelor of Technology in textile engineering at the University of Calcutta, India; his Master of Science in textiles science & engineering at the University of Leeds, England; and his Ph.D. in fiber & polymer science at the University of California, Davis.

End-to-end solutions for the entire business lifecycle



Our expertise worldwide



Many countries like China, India, Germany have multiple locations for testing, inspection & audit

Sustainability

70% of a products environmental impacts are determined in the design step

Traditional material in Footwear

- Leather
- Adhesives
- Rubber-natural and recycle
- PVC
- PU

New Approach

- Natural materials
- Recycle materials
- Renewable materials
- Bio-based materials
- Alternative materials





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Recycled Content Verification

Trends in the Industry

- Using recycled material will be the trend in textile and footwear industry
 - **Actions by EU**
 - Banned the discarding of textile waste and asked Member States to start specific recycling of textiles in 2025
 - **Actions by Brands**
 - H&M Group has set up clear goals: their mission is to only use recycled or other sustainably sourced materials by 2030
 - Decathlon claims that their goal is to obtain 100% of their polyester from sustainable sources by 2021
 - Adidas has committed to using only recycled plastic by 2024
 - IKEA claims that no virgin polyester will be used on their products by the end of 2020

Challenges

- **Consumers**
 - How to know they are really using recycled materials instead of virgin ones?
 - Is it safe to use these products?
- **Factories, Brands and Retailers**
 - Is self-declaration of the products' recycled source and content enough?
 - How to prove the claimed recycled content of the products?
 - Is it traceable throughout the supply chain?



Existing Solutions

- **Testing**
 - e.g. based on the thermal behaviors or based on IPA(isophthalic acid) content to identify a PET material is recycled or not.

Incomprehensive

- **Certification through auditing, e.g. Global Recycled Standard**

High Cost

Long lead time



TÜV SÜD's Approach

- **Recycled Content Verification (RCV) service**
 - Traceability Platform for Recycling Product Verification



Flexibility



Lower
Cost



Shorter
Lead
Time



Recycled Content Verification - Process

- **Verification Standard**
 - TÜV SÜD Recycled Content Verification Standard
- **Desk Verification:** documents review, including procedure documents and records related to RCVS products manufacturing
- **Onsite Verification:** staffs interview and onsite observation which includes
 - Control of input material,
 - Control of manufacturing process,
 - Control of quality assurance
- **Traceability platform**

The Traceability Platform

Please input the keywords of your interested company:

Search



List of matched company:

	Company Name	Actions
1	ABC Company	Products
2	DEF Company	Products
3	HIJ Company	Products
4	PPP Company	Products
5	KKK Company	Products

Products List from ABC Company

	Product Name	Style No.	Product amount	Actions
1	Grey women shirt	S001	2000 pieces	Recycled Info
2	Blue women shirt	S002	5000 pieces	Recycled Info

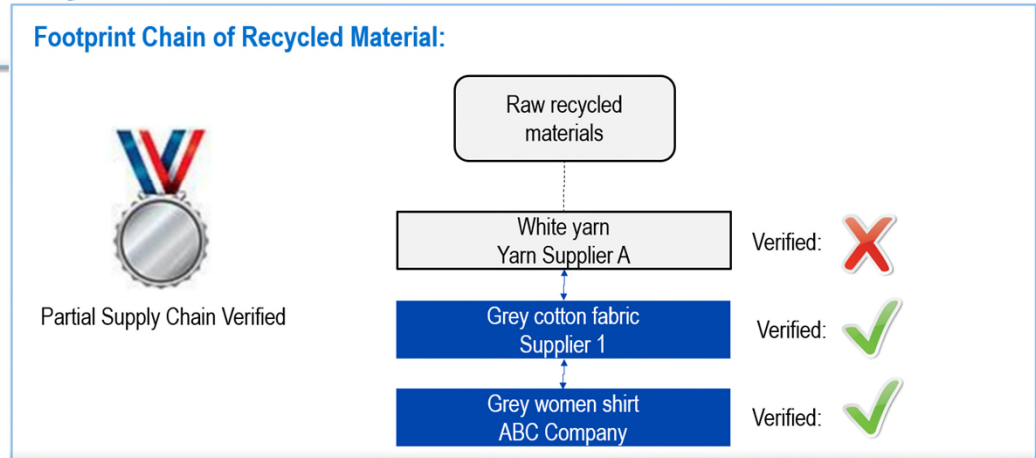
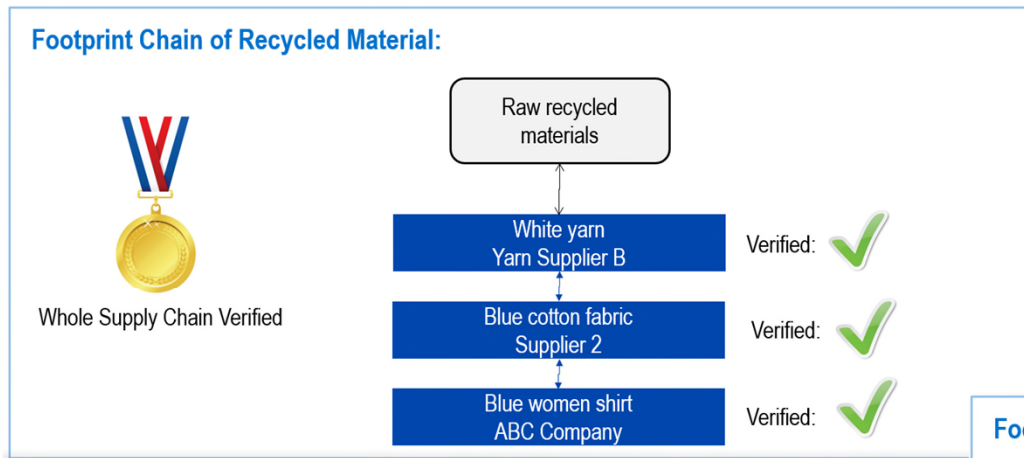


Recycled Info of Products [Grey women shirt / S001]

1. Total percentage of recycled materials in the product: 25%
2. Recycled content verified by TÜV SÜD on: 2019-09-01
3. List of recycled materials in the products:

	Materials Description	Percentage of the recycled materials in the product	Supplier	Actions
1	Grey cotton fabric in sleeve	5%	Supplier A [Footprints]	Footprint Chain
2	Grey cotton fabric in back panel	20%	Supplier B [Footprints]	Footprint Chain

Traceability Platform for Recycling Product Verification





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Vegan Content Verification

Trends in the Industry

- More and more consumers, brands and organizations concern about the animal rights.
- The British Retail Consortium (BRC) has issued new guidelines to help retailers and brands source vegan fashion products in Feb. 2020.
- Hugo Boss has launched its first animal-free men's suit, certified with the PETA-Approved Vegan logo in Mar. 2020.
- New Look has become the first high-street fashion retailer to register products with The Vegan Society's Vegan Trademark, in 2019.
- Adidas introduced its vegan sport shoes - “Stella #stansmith” in 2018.



Challenges

- Materials that may contain animal raw materials:
 - Leather, Fur, Down, Textile, Dyes, Glue, Fats & Oils, Waxes

- Various animals and organs are involved:
 - Pig / cow / sheep / silkworm / duck / Insects etc.;
 - Skin / hair / horn / bone / secretory fibers etc.

So,

- How to make sure unexpected animal components are not existed in raw materials?

- How to make sure unexpected animal components are not added to the products during the manufacturing process?

- How do I know if a vegan leather product was ethically made?



TÜV SÜD's Approach

- **Service 1 - Vegan product identification testing**

- For “macroscopic form samples”, such as fabric, leather, fiber, fur, feather, down, TÜV SÜD labs can identify them by using various techniques (microscopy, burning, chemical reaction, physical characteristics and so on).
- For “non-macroscopic form samples”, such as Dyes, Glues, Waxes, TÜV SÜD labs can use Kjeldahl method, amino acid analysis method, DNA method or other methods to determine if a sample contain proteins.



TÜV SÜD's Approach

- **Service 2 - Vegan Mark via certification service:**

- Lab Testing: to identify if products contain any animal materials;
- BoM verification: the client submit the products Bill of Material (including process chemicals) for verification;
- Process Chemical Suppliers' declaration verification- verifies process chemicals that have been declared by the producer to be free of substances of animal origin;
- Production Monitor: onsite factory surveillance;



Thank you for your attention!

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