Day 3 - 23 Sept. 2021

Morning

DAY 3 (MORNING-PART I) 23 SEPTEMBER 2021

9.00-9.30	Registration
9.30-9.45	Wrap-up Day 3 - SDA Bocconi & UNECE
9.45-11.00	MODULE 8: THE TECHNOLOGY MODEL FOR TRACEABILITY AND TRANSPARENCY AND DUE DILIGENCE IN TEXTILE AND LEATHER
	Learning Objective : Deep dive into the UNECE blockchain system for due diligence and sustainability, emphasizing the importance of technology interoperability.
	Presenters
	 UNECE Project Expert, Andrea Redaelli
	 UNECE Project Expert, Claudia di Bernardino
	Discussants
	 Vivienne Westwood, Giorgio Ravasio, Country Manager Italy
	 Vivienne Westwood, Isabella Tonelli, Supply Chain Sustainability Manager
	 Cittadellarte - Fondazione Pistoletto, Paolo Naldini, Director
	· Cittadellarte - Fondazione Pistoletto, Olga Pirazzi, Project Manager of
	Fashion B.E.S.T.
	Cotonificio Albini Spa, Stefano Albini, President
	Dedagroup Stealth, Silvia Santato, Marketing Manager
11.00-11.30	Coffee break
11.30-13.00	MODULE 8: THE TECHNOLOGY MODEL FOR TRACEABILITY AND TRANSPARENCY AND DUE DILIGENCE IN TEXTILE AND LEATHER
	Learning Objective: Deep dive into onboarding partners, setting consortia,
	dealing with data management and IP rights and the role of physical markers
	Presenters
	 UNECE Project Expert, Piera Solinas
	 UNECE Project Expert, Claudia di Bernardino
	Discussants
	 Filmar Group Spa, Enrico Marzoli, Vice President (online)
	 Haelixa, Gediminas Mikutis, CTO and Co-founder
13.00-14.00	Lunch

















UNECE-SDA Bocconi Regional Workshop 21-23 September 2021

Module 8/1 The Technology model for TT and due diligence in textile and leather

SEPT, 23 - 9:45 - 11:00 CEST

Andrea Redaelli, UNECE Project Expert Claudia Di Bernardino, Lawyer, UNECE Project Expert













The potential of advanced technologies, Developing and implementing blockchain systems, the success of a TT initiative.

Andrea Redaelli, UNECE Project Expert

The potential of advanced technologies to advance traceability, transparency and due diligence focus on Blockchain/DLT



FARM cotton cultivation



HARVEST collection of cotton bales



GINNING seed and contaminations are removed



SPINNING fibres are spun into yarn



DYEING yarn is dyed to obtain preferred colour



WEAVING premium quality fabric is produced



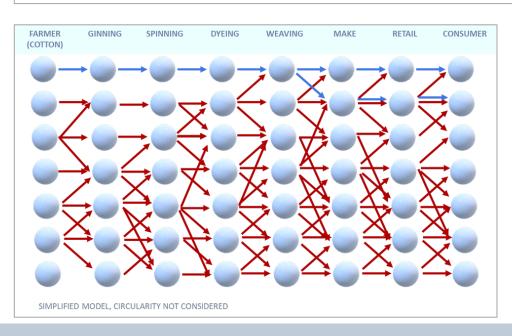
FINISHING treatment to smoothen and release fabric with desired properties

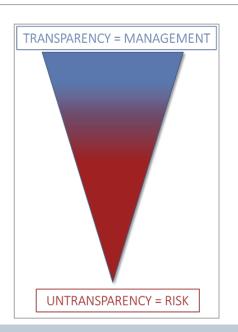


SEWING putting the garment together



BRAND & RETAILER in stores





DISTRIBUTED LEDGER TECHNOLOGY

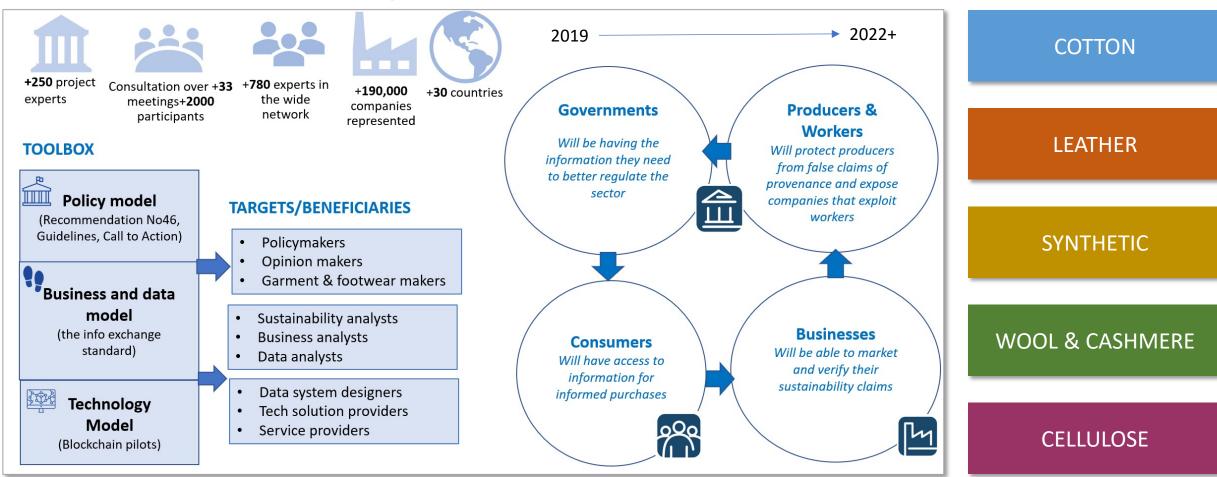
- UNMUTABLE DATA SHARING
- MUITIPLE POINTS
- FRAGMENTED ENVIRONMENTS
- EASY SCALABILITY

How Blockchain supports

- Digital solution that reduces distances:
- BUSINESS CONTINUITY AND SHARED LEDGER TRUST
- High level of penetration and acceptance (also via smartphone)
- Technology to offer the transparency: a distributed database,
- Timestamp on activities and "body of evidence" (automation, digital-physical, IOT)
- Data sensitivity/privacy topic → regulation as balance between transparency and data confidentiality
- Governance



Developing and implementing blockchain systems in complex environment





Key aspects for success of a TT initiative



VALUE CHAIN ALIGNMENT:

- > Identification and early engagement of upstream and downstream partners;
- Consider the granularity level and complexity of the value chain selected



KNOWLEDGE SHARING:

- > Training of partners/value chain suppliers and empowering all value chain actors;
- Terminology and process understanding;
- Build Knowledge and Trust upon long-lasting partnerships and win-win cooperation;



GOVERNANCE

- Central coordination vs. Self-coordination of the activities along a Value Chain (B2B)
- > (UNECE Secretariat) Neutral moderator of business operational activities



DATA MANAGEMENT

- Data Sharing and Immutability
- ☐ Data Confidentiality and Privacy vs. Data Transparency Levels



TECHNOLOGY

- Open-source approach to share information
- Academy as an independent technology provider





The potential of advanced technologies to advance traceability, transparency and due diligence focus on blockchain/DLT



www.unecettbcpilot.



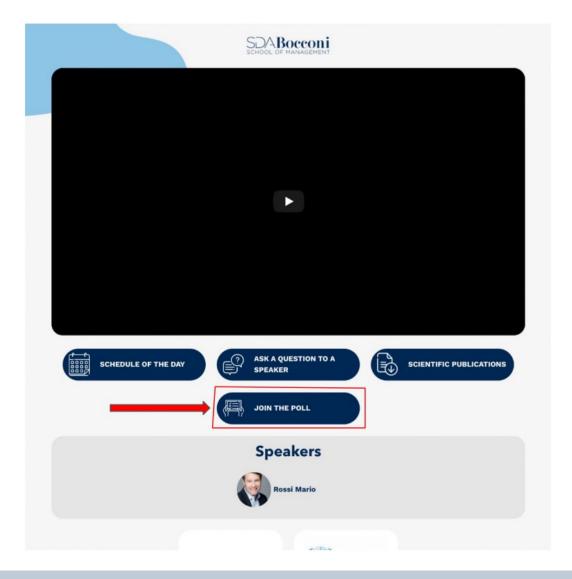




Join the poll: instructions

Live stream page

- Log into the website(https://event.sdabocconi.it/monitoruler4unece/)
- Click the button "Join the poll"



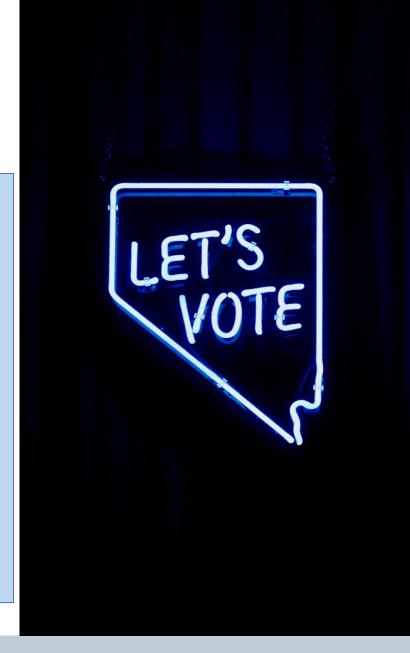




Poll 1 – TT Program as advantage

As a Company in the B2B, are you more interested to collaborate and make business with Companies having a TT program in place?

- ☐ TT program is relevant, but in my Company the choices are more oriented by cost and quality;
- ☐ TT is a big value that helps my Company to fulfil due diligence aspects and better serve the end consumer;
- ☐ A TT program is just an additional step to contribute in a sustainable program;
- ☐ In the future, we will collaborate with Companies having a TT program in place only.

















Identifying claims and supporting data

Claudia Di Bernardino, Lawyer, UNECE Project Expert

Claims concept for traceability and transparency within the pilot

A high-level statement about a characteristic of a product, or about a process or an organization associated with that product

Claim

Source: UNECE Draft Policy Recommendation, Guidelines

A claim that covers one or multiple sustainability dimensions Sustainability (economic, environmental, social) Claim

> Source: UN Environment Guidelines for Providing **Product Suastainability Information**



- Hazardous chemicals
- Pesticide and fertilizer use
- Water use
- Water pollution and wastewater management
- Waste production and management
- End-of-life

- Child labour Forced/compulsory labour
- Trade unions and collective bargaining rights
- Discrimination
- Sexual harassment
- Exploitation of home workers
- Working conditions

- Unsafe workplaces and workpractices
- Inadequate personal protective equipement
- Bribery and corruption
- Land rights and community welfare
- Animal welfare

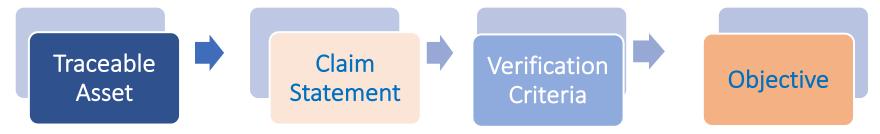
UNECE Policy Recommendation n. 46





Building the sustainability claims: UNECE methodology

Components of Sustainability Claims



Selection of Sustainability Claims







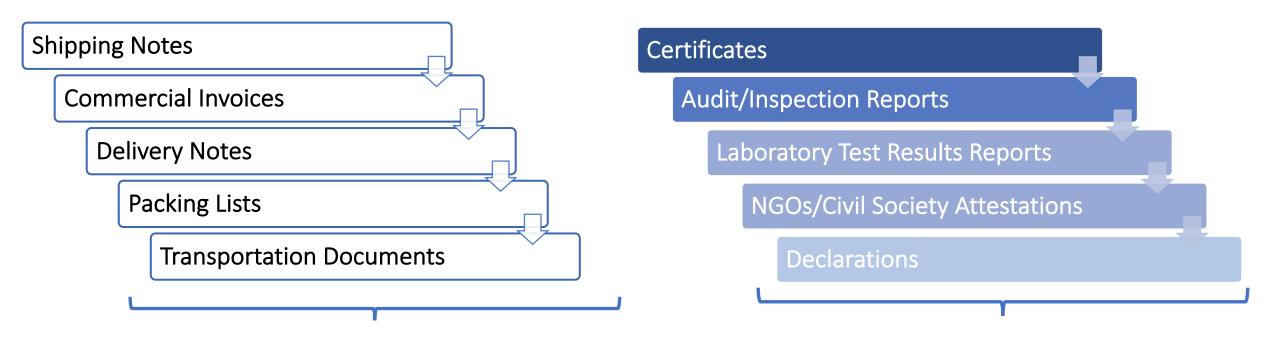
Type of evidences to substantiate the claims

Data Collection

1. Information on Traceable Assets, Claims and Partners

Traceability Evidences

- 2. Documents related to Transactions
- 3. Documents related to Sustainability Claims

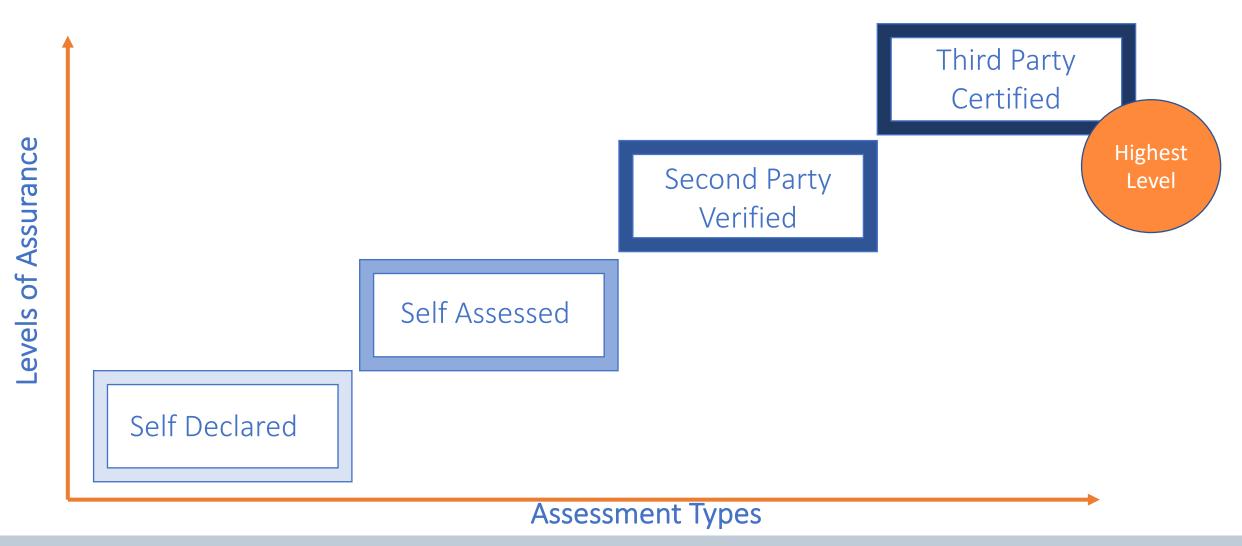






Transparency Evidences

Adding an assurance level to the evidences



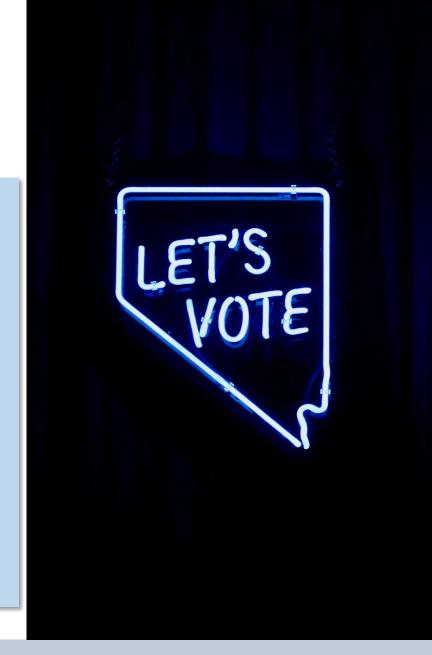




Poll 2 - Sustainability Claims

As a Company in the Industry, which is the main challenge in developing sustainability claims?

- ☐ Collecting the data from your business partners;
- ☐ Verifying the credibility of the information provided by your suppliers, especially beyond tiers 2;
- ☐ Understand the regulatory requirements to build not misleading claims.





















The Cotton Partners' contribution to the project, use cases.

Giorgio Ravasio, Vivienne Westwood, General Manager Isabella Tonelli, , Vivienne Westwood, Supply Chain Sustainability Manager Paolo Naldini, Cittadellarte - Fondazione Pistoletto, CEO-Director Olga Pirazzi, Cittadellarte - Fondazione Pistoletto, Fashion B.E.S.T. Project Manager Stefano Albini, Cotonificio Albini S.p.A., President



TRACEABILITY AND TRANSPARENCY BLOCKCHAIN PILOT IN THE GARMENT AND FOOTWEAR INDUSTRY





C O N N E C T









CITTADELLARTE FASHION B.E.S.T.

C O O P E R A T E

- Expertise in sustainable supply chain tracking
- Cultural research and dissemination
- Communication campains and events































THE SUSTAINABILITY PLEDGE Cittadellarte Fashion B.E.S.T. - Vivienne Westwood

PARTICIPATING
IN THIS PILOT PROJECT,
CITTADELLARTE FONDAZIONE PISTOLETTO
AND WV HAVE TAKEN THEIR
"SUSTAINABILITY PLEDGE",
IN REGARD TO BOTH FABRIC
AND PRODUCT DEVELOPMENT.

WHY IT'S TIME FOR ACTION ON SUSTAINABILITY ransparency and a responsible consumption and product countries and regions to transition to a circular economy Transparency and traceability are essential if, globally, we are to achieve responsible consumption and production patterns that will enable more **POLICY MAKERS** will have the information they need to better regulate the sector 000 0000 While great transparency and traceability **COMPANIES** will protect **PRODUCERS** from false claims will be able to market and verify their of provenance and expose companies that sustainability claims exploit WORKERS





CITIZENS

will have access to information for informed purchases





PROJECT TIMELINE

Blockchain Cotton Pilot Project VW





2021

Capacity Building

with VW Partners

Training on UNECE Blockchain Platform

June

2021

July

Final UNECE **Blockchain Training** and workshop sessions.

Finalization of supply chain graphs, transactions and upload of documents



2021

April - May

Dry Run of UNECE Blockchain Platform



2019

September - December

Feedback on Business **Process Descriptions**

Screening of potential supply chain partners

Internal VW Testing of Methodology with selected partners

January - December

2020

Virtual Workshop w/ **UNECE** and Piloting of offline data collection

Screening of SS21 Products to include in the scope of Pilot Project.

Selection and initial mapping and data collection.

2021

January - April

Bilateral Sessions with

VW Project Partners to

align on deliverables,

data collected and for

status update

with Cotton Pilot **Partners**









COTTON VALUE CHAIN: SUPPLY CHAIN STEPS IN-SCOPE

Phases tracked and traced with supporting documentary evidence

Recycled Denim Jeans

1. Planting and cultivation of cotton

2. Cotton harvest identification & transfer from farmer to ginner

3. Ginning & transfer to spinner

4. Spinning & transfer to dyer, bleacher, washer

5. Dyeing, bleaching, washing & transfer to weaver

ing,
ing,
6. Weaving
8 & transfer to
fabric finisher

7. Garment or product production & transfer to enablement

8. Product
Enablement &
packaging and
transfer to
"retailer"

9. Placement of product in stores or on-line for sale

10. Consumption and disposal

11. Post consumption recycling

Information and data identified but not disclosed or entered on the blockchain platform

Organic Cotton Shirt

1. Planting and cultivation of cotton

2. Cotton harvest identification & transfer from farmer to ginner

3. Ginning & transfer to spinner

4. Spinning & transfer to dyer, bleacher, washer 5. Dyeing, bleaching, washing & transfer to weaver

6. Weaving & transfer to fabric finisher

7. Garment or product production & transfer to enablement

8. Product
Enablement &
packaging and
transfer to
"retailer"

9. Placement of product in stores or on-line for sale

10. Consumption and disposal

11. Post consumption recycling









PROJECT SCOPE OF THE VIVIENNE WESTWOOD PILOT



Main Activities

- Testing tools developed by UNECE following approved guidelines and methodologies
- Data Collection
- Capacity Building

Value Chain:

Cotton

Blockchain Platform

- Dry Run
- Test of the system with two pilot products
- Upload of final data









SELECTION OF PRODUCTS AND CLAIMS TO BE TESTED





SLIM SHIRT Season SS21 CLASSIC TAPERED JEANS Season SS21

CLAIMS

Traceability of Origin

Organic Content

Traceability of Origin

Recycled Content

Chemical Compliance









SELECTION OF PRODUCTS AND CLAIMS TO BE TESTED





SLIM SHIRT Season SS21



CLASSIC TAPERED JEANS

Season SS21

CLAIMS

"The material of this shirt is made of organic cotton sourced from USA and totally traceable in its value chain. This cotton yarn is organic, produced without the use of pesticides and harmful chemicals for health and the environment"

"The fabric of this jeans is made of 65% regenerated cotton yarn coming from the pre-consumer waste of our Italian fabric supplier and 35% of virgin cotton sourced from Turkey. From the yarn up to the finishing of the denim material the processing steps avoid the use of harmful chemicals for the health and the environment"







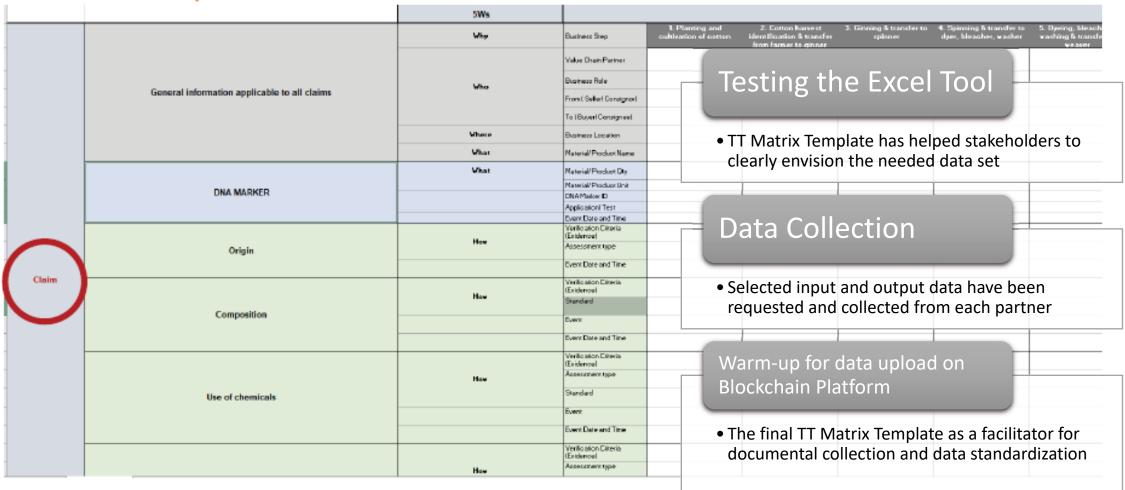




UNECE TT MATRIX TOOL AS AN ENABLER FOR DATA COLLECTION

4. TRACEABILITY AND TRANSPARENCY MATRIX

TT Matrix Template









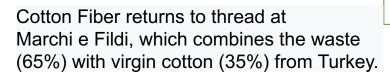


CASE 1: RECYCLED DENIM - CLAIM ORIGIN



100% cotton yarn, is an unavoidable waste of the dyeing process that takes place in Berto. It is collected and shipped to Marchi & Fildi

Veneto, Italy



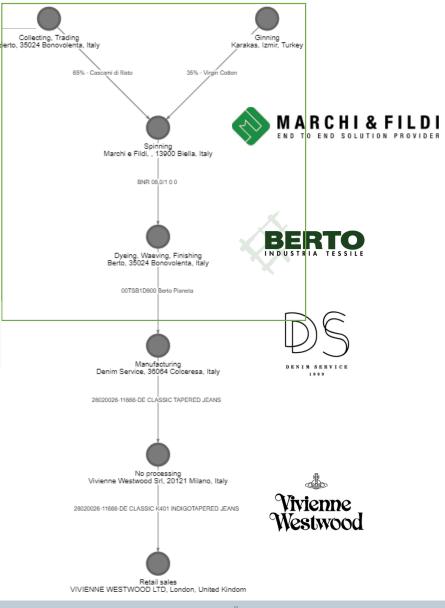
Piedmont, Italy (65%) + Turkey (35%)



After the Spinning phase in Biella it is returned to Berto for Dying, Weaving and Finishing

Veneto, Italy

MARCHI & FILDI











CASE 1: RECYCLED DENIM - CLAIM ORIGIN



Finished Fabric is shipped to Denim Service for product manufacturing

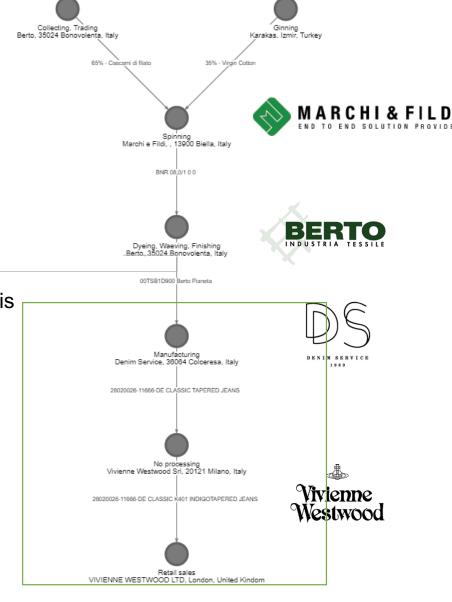
Veneto, Italy

The finished Classic Tapered Jeans is ready for shipment to Vivienne Westwood Italian Warehouse

Piedmont, Italy

From central Logistic Hub it is dispatched to London Boutique

London, UK











CASE 1: RECYCLED DENIM - CLAIM USE OF CHEMICALS

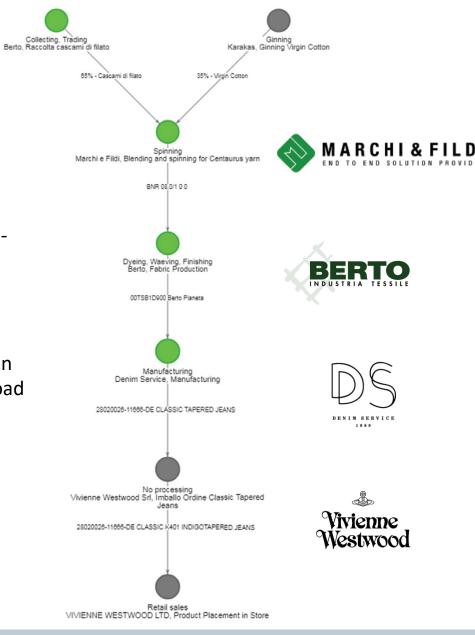
Examples of Oeko-Tex Scope Certificate



During the project, three OEKO-TEX Standard 100 Scope Certificates were collected to support the claim

The green nodes of supply chain indicate the verification of upload and validity of certificates.













CASE 1: RECYCLED DENIM - CLAIM RECYCLED CONTENT





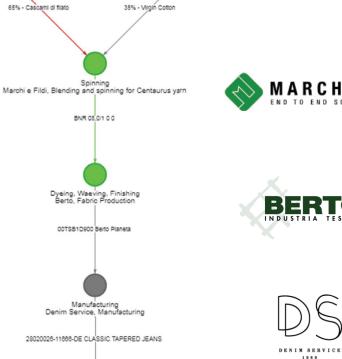


Example of GRS Transaction Certificate



Example of GRS Scope Certificate GRS 2019-063 Ed.00B/Rev.00 Certificate of Compliance GRS 2019-063 Institute for Ethical and Environmental Certification dichiara che Berto E.G. Industria Tessile Srl Licence Number: GR0176 Bovolenta (PD) - ITALY has been inspected and assessed according to the è stata ispezionata e valutata GLOBAL RECYCLED STANDARD (GRS) Version 4.0:2017 and that products of the categories as mentioned below (and further specified in the annex) comply with this standard: e che i prodotti appartenenti alle categorie indicate di seguito, e specificatamente descritti in allegato, sono conformi con lo standard Categorie di prodotti Denim Fabrics - Tessuti Denim Processing steps carried out under responsibility of the above mentioned company for the certified products: Processi svolti sotto la responsabilità della ditta sonra indicati Manufacturing, trading - Manifattura, commercialis This certificate is valid until: June 3rd, 2021 Place and date of issue/revision Bologna, June 4th, 2020 Dr. Paolo Foglia M.0401 - Ed.00 Rev.01 conflication of goods delivered in provided by a valid Transaction Conflicts (TL) covering them. The intaking body can withdraw the complicate hope in expire it placed declared complicate in the longer grantee. This electrosically hand document in the valid original warrian. This conflictate in only valid if prejudenced in the database of ICLA (worstein labo) and of Intale Evolumps

During the project, two GRS Transaction Certificates and two GRS Scope Certificates were collected, referred to Berto Industria Tessile Srl and Marchi & Fildi Spa



No processing

Vivienne Westwood Srl. Imballo Ordine Classic Tapered

28020026-11666-DE CLASSIC K401 INDIGOTAPERED JEANS

Retail sales
VIVIENNE WESTWOOD LTD, Product Placement in Store







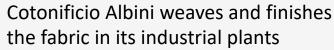




CASE 2: ORGANIC COTTON SHIRT -CLAIM ORIGIN







Lombardy, Italy + Lethorad, Czech Republic

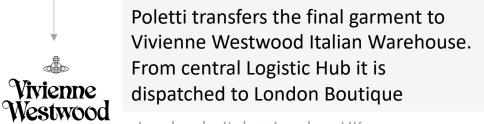




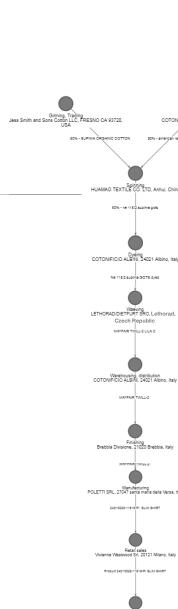
The finished fabric is then sent POLETTI s.r. to Poletti for the garment manufacturing

Lombardy, Italy





Lombardy, Italy + London, UK





POLETTISAL









Warehousing, distribution COTONIFICIO ALBINI, 24021 Albino, Italy



CASE 2: ORGANIC COTTON SHIRT - CLAIM ORGANIC CONTENT



Example of GOTS Transaction Certificate



Example of GOTS Scope Certificate



COTONUE DICE AL RACE DEPRO.

No 1163 SUPER GOTS GIVE

No 1163 SUPER GOTS GIVE

GROUP

GROUP

LETHORADIDIETRUST SRO, Weaving

MAYTAR TURL-2-LIAD

American raw cotton

Warehousing, distribution COTONIFICIO ALBINI, Stockaggio american raw cotton

50% - SUPIMA ORGANIC COTTON

Spinning HUAMAO TEXTILE CO. LTD, spinning

50% - ne 115/2 sunime note

Warehousing, distribution)TONIFICIO ALBINI, ACCORPAMENTO TESSUTI

Manufacturing
POLETTI SRL, CONFEZIONE CAMICIA

Product 24010025-11516-PJ SLIM SHIRT

VIVIENNE WESTWOOD LTD, Product Placement

POLETTI S.T.I



During the project, both GOTS Transaction Certificates and GOTS Scope Certificates were collected









UNECE BLOCKCHAIN PLATFORM: FROM TESTING TO PILOT CASES FINALIZATION

UNECE Blockchain Platform Log-in page

UNECE Traceability & Transparency Blockchain pilot



	Lordo
	☐ Show password
Password:	Password
Username:	Username

To build the platform, a dry-run was previously carried out with the help of the UNECE Blockchain Team and the partners involved in the project

Blockchain Platform Meetings and Trainings:

+15 sessions from May to July 2021

Stand-up Meetings: 10

Key users created: 7
Trainers involved: 4





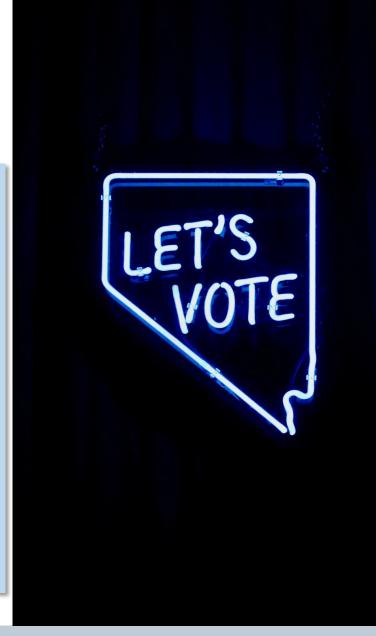




Poll 3 – The Voice of the Customer

As an end consumer, are you open to consider ONLY Transparent Brands and Traceable finished garments in your shopping experience?

- ☐ I'm neutral and I want to leave open what the Companies are doing in their business;
- ☐ A transparent Brand has my trust, I do consider only them!;
- ☐ I don't matter the Brand, the finished products are only important for me;
- ☐ I need a tool to trace the origin the goods and other claims to drive my buying choices.















Since more than a decade we have a clear vision on sustainability, which is oriented at:



1. Sustainable Materials

Organic, recycled & eco-friendly materials



2. Supply Chain Control

Transparency & traceability



3. Social Responsibility

Respect & enhancement of people





Traceability: how does it work?









What is behind Supima cotton?

The project finds its roots in:

- the experience acquired in the selection of the best raw materials and in the direct cultivation of cotton in Egypt, Barbados and the United States
- the close collaboration with six farmers located in Texas, New Mexico and California
- the need to have an **organic and traced cotton**, which is ethically grown and of the highest quality



Traceability: how does it work?



What makes a cotton "organic"?

To be defined as "organic", a cotton must come from **organic plantations** that meet the following requirements:

- The cultivated land has produced **exclusively organic products** for the previous three years;
- The seed is GMO-free;
- Chemical fertilizers, insecticides and pesticides are **not used**;
- The defoliation is natural.



Traceability: how does it work?



- 1. Cotton samples are collected from the crop field
- 2. Samples are analyzed by Oritain™ using forensic science
- 3. Datas are transformed into a unique fingerprint for that cotton
- 4. The product can be checked at any stage of the production chain to verify that it is compatible with its original fingerprint
- 5. Only an exact match proves that the product is authentic

The product is traced from the field to the fabric/garment, as a guarantee of its:

- Origin
- Quality
- Ethical and sustainable production



Traceability: what can you get?



- On a B2B level: we can supply you with the Verification of Origin by Oritain™ for the finished fabric
- On a B2C level: you can work with Oritain™ to obtain the certification also for the garment



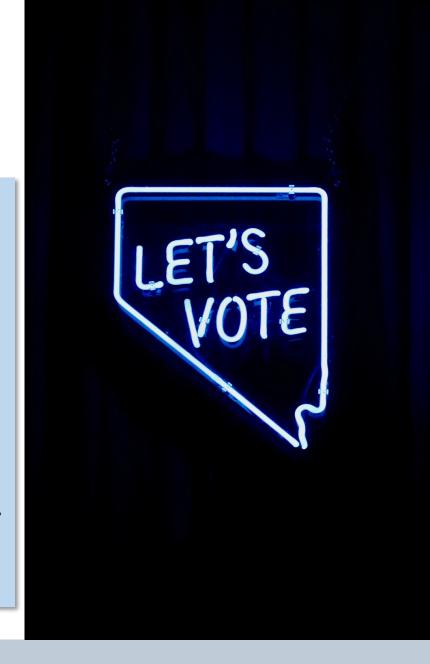




Poll 4 – Industry takes action!

As a Company in the B2B or B2C, are you ready to take action and start a TT program?

- ☐ Yes, but I don't know how to step-in action;
- ☐ I need an internal discussion to include the TT in our strategies;
- ☐ We already have a TT program in place;
- □ Not now, I want to wait for others to implement a TT program before to decide.

















Module 8/1 The Technology model for TT and due diligence in textile and leather

Dedagroup Stealth, Silvia Santato, Marketing Manager

What market says

The fabrics we have already produced are enough for us, yet we continue to produce huge quantities of garments from virgin fabrics

Sara Arnold co-founder Fashion Act Now

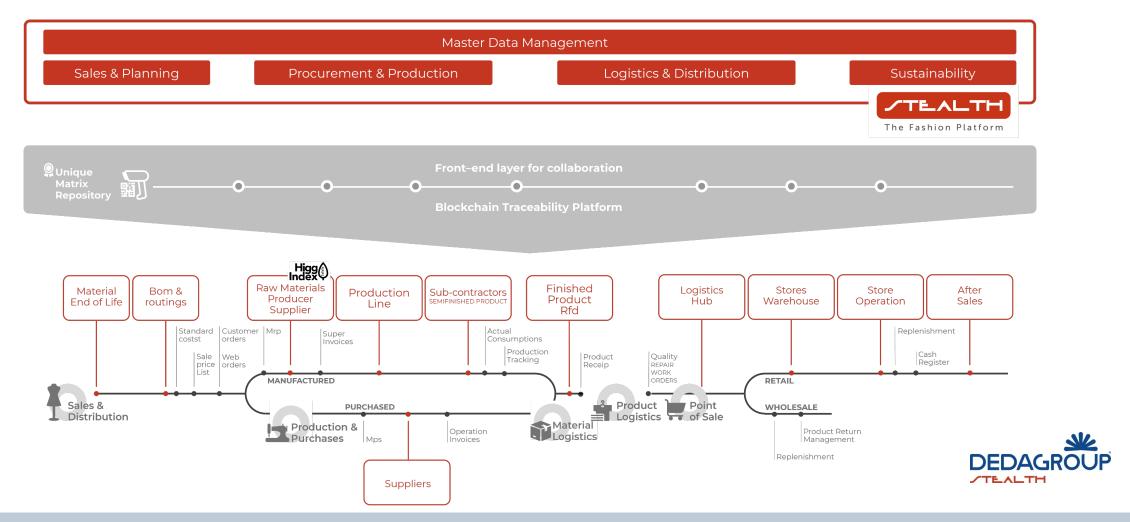
- A new generation of designers called «regenerative» is being born with an environmental approach that starts from the conception and design of the product
- The «creative recycling» trend has characterized some SS 2021 collections of luxury brands
- New designers should be able to use surplus stocks of available raw materials, instead of ordering new ones
- Change in the creative process







The integration of Blockchain technology into the ERP system



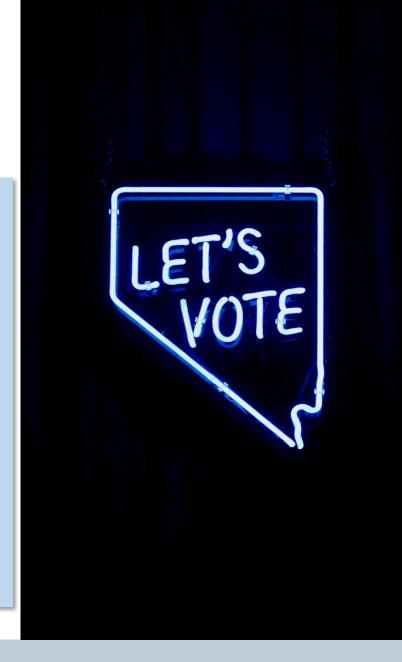




Poll 5 – Integrated Technology!

Has the Blockchain technology a relevant role in the data exchange for TT?

- ☐ Yes, an open source Blockchain platform is to guarantee the trust among many different players;
- ☐ I'm quite agnostic about the technology, I agree that verified data is the most important fact;
- □ I don't know what Blockchain is and how to use it;
- ☐ Other technologies can be more relevant to exchange data in a TT program.







Polls (results)





A&Q





UNECE-SDA Bocconi Regional Workshop 21-23 September 2021







THANK YOU JOIN THE SUSTAINABILITY PLEDGE

thesustainabilitypledge.org

Day 3 - 23 Sept. 2021

Afternoon

14.00-15.30	MODULE 8: THE TECHNOLOGY MODEL FOR TRACEABILITY AND TRANSPARENCY AND DUE DILIGENCE IN TEXTILE AND LEATHER
	Learning Objective: Deep dive into UNECE blockchain system features and
	functionalities through demos for the cotton and leather blockchain pilots and
	address data privacy and security issues
	Presenters
	UNECE Project Expert, Andrea Redaelli
	UNECE Project Expert, Claudia di Bernardino
	Discussants
	 SUPSI University, Giacomo Poretti, IT Engineer Senior Researcher (online)
	 SUPSI University, Luca Ambrosini, IT Engineer Researcher
	UNECE Project Expert, Deborah Taylor
	 FAO Regional Office Latin America and the Caribbean, Ingrid Zabaleta, Regional Executive Assistance + Cotton Project (online)
15.30-16.00	Coffee break
16.00-16.30	CLOSING CEREMONY
	· SDA Bocconi, Giuseppe Soda, Dean (tbc)
	 UNECE, Elisabeth Tuerk, Economic Cooperation and Trade Division Director (online)



