Fånga värdet av textilavfall genom cirkulär data

Emma Eneborg, RISE

3 projekt:

CISUTAC
- Beslutsverktyg
- Sorteringspilot

REGIOGREEN TEX
- Matchningsverktyg för SMEs

Framework for Circular textiles (RISE)
- Klassificeringsverktyg

Vilken cirkulär data finns?

Tillgänglig data

Uppströms:

- LCA
- Varaktighet
- Fiberlängd
- Kemikalier
- TRL 3 och 4

Nedströms:

- Högt behov

Textiles Workshop Results

Confidentiality and Availability of Needed Information

	Upstream Stakeholders		Downstream
Data point	**Availability**	**Confidential**	**Need**
Commercial information (descriptions, ...)	0.17	0.42	0.5
Warranty information	0.05	0.18	0.5
Care instructions	0.04	0	0.08
LCA / footprint of goods or services	1.54	0.83	0.25
Design strategy (for reuse, refurbish, repair, ...)	0.82	0.09	0.58
Durability test results	0.5	1.04	0.58
Disassembly instructions	1.05	0.27	0.42
Instructions for disposal / take back	0.96	0	0.67
Staple fibre length	1	1.18	0.25
Material composition	0.04	0.08	0.83
Component weight	0.42	0.83	0.5
Hazardous substances	0.45	0.68	0.67
Material origins	1.08	1.08	0.42
Biodegradability	1	0.27	0.17
Recycled content	0.38	0.17	0.42
Chemical content	0.85	1.55	0.67
Tier 1 company data (e.g. cutting, sewing)	0.33	0.83	
Tier 2 company data (e.g. weaving, knitting)	0.92	1.08	
Tier 3 company data (e.g. spinning, dyeing)	1.71	1.04	
Tier 4 company data (e.g. farm, oil drilling)	2	0.92	

Material and supplier information

Confidentiality:	0 = not confidential	3 = confidential
Availability:	0 = available	3 = not available
Need:	0 = no need	1 = high need

CIRPASS Final Event – CIRPASS (cirpassproject.eu)

Digital infrastruktur

Standard tag

Digital label (RFID)

Vilken roll kan data spela för textilt avfall?


1 % fiber till fiber
återvinnig
50 % utanför EU

Spelregler för data

Route-> Chemical recycling

Solution for post-consumer textile waste management — CISUTAC

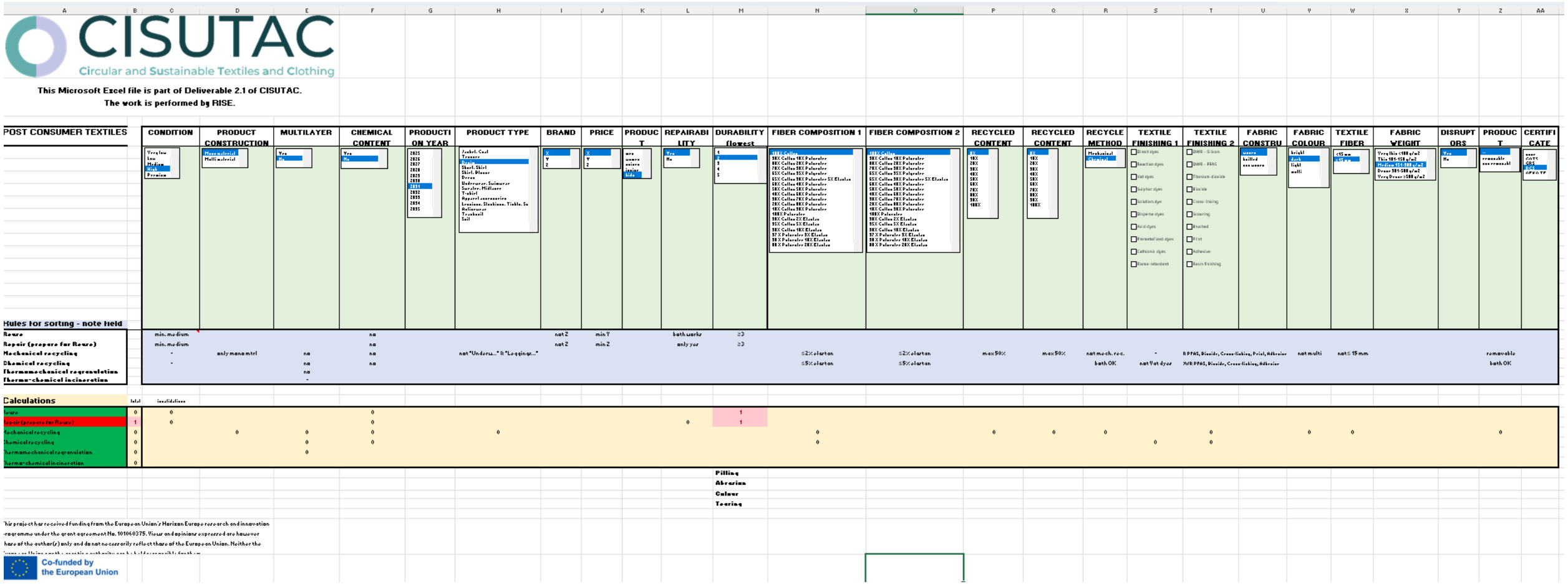
Open access tool for channeling waste

By prioritising data points for efficient sorting to reuse and recycling, our tool empowers the textile ecosystem to make informed decisions, driving a digital change in line with the upcoming digital product passport legislation, and enabling a more accurate feedstock for the recycling industry and unlocking potentials for the reuse market. ♻️

CISUTAC

RI. SE

Beslutsverktyg för sortering



Solution for post-consumer textile waste management — CISUTAC

Vilken cirklär data är relevant för återbruk, reperation och återvinning?

23 data-punkter för sortering

Condition	Multilayer	Brand
Product construction	Chemical content	Product type
Fibre composition 1	Textile finishing	Production year
Fibre composition 2	Fabric weight	Product gender
Repairability	Fabric colour	Fabric construction
Durability	Recycle method	Certificate
Disruptors	Recycle content	Price
Product disassembly	Textile fibre	

10 data-punkter främjar återvinning

Condition	
Product construction	Chemical content
Fibre composition 1	Textile finishing
Fibre composition 2	
	Fabric colour
Disruptors	Recycle content
Product disassembly	

1 data-punkt särskiljer sig....

Condition

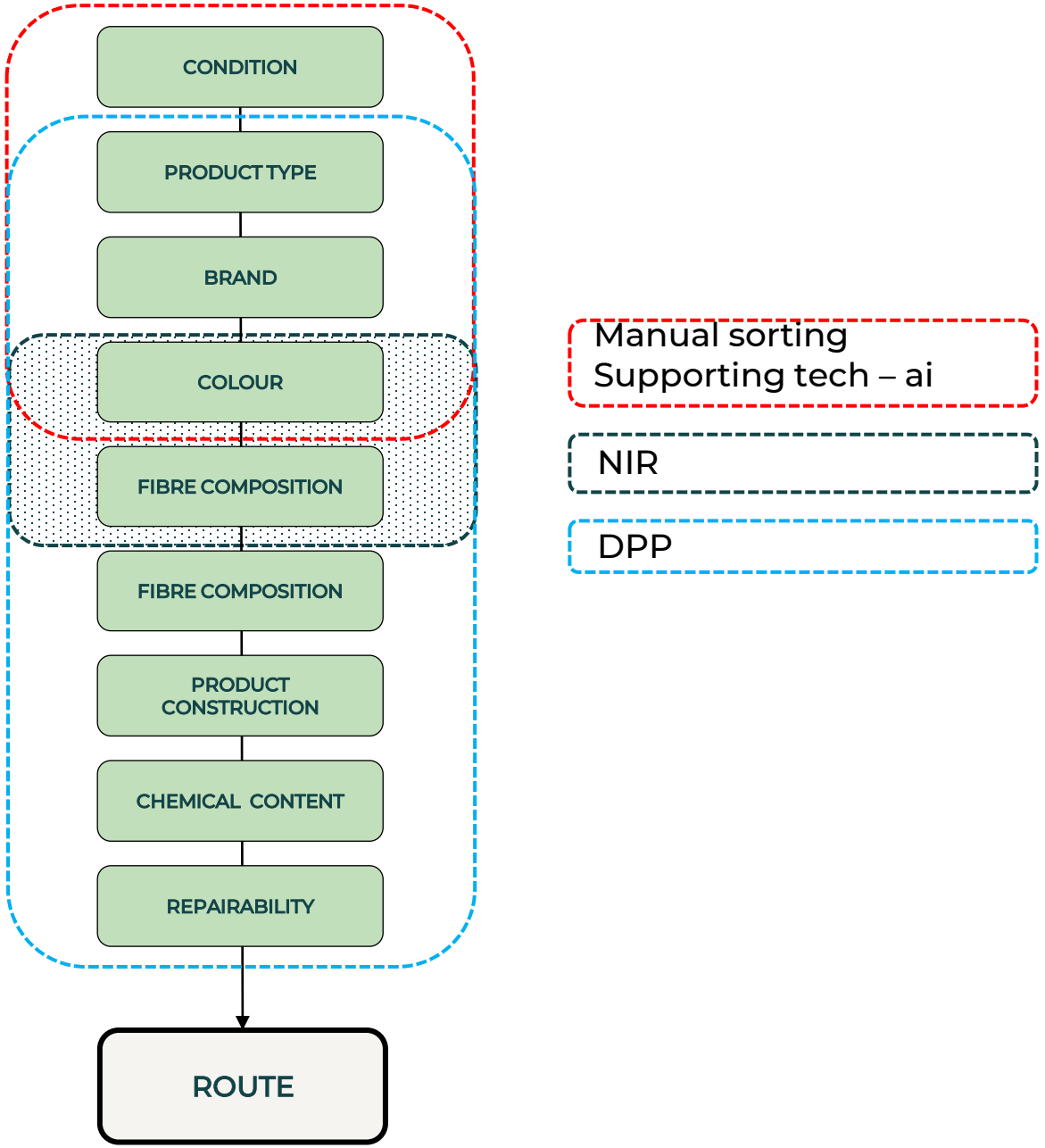
3 data-punkter hanteras av teknik idag

Fibre composition 1

Fabric colour

Disruptors

Teknik i framtiden



22 data punkter behövs i DPP

	Multilayer	Brand
Product construction	Chemical content	Product type
Fibre composition 1	Textile finishing	Production year
Fibre composition 2	Fabric weight	Product gender
Repairability	Fabric colour	Fabric construction
Durability	Recycle method	Certificate
Disruptors	Recycle content	Price
Product disassembly	Textile fibre	

Insikter

- Skickgradering avgörande för fungerande en sortering
- Återvinning behöver detaljerad data och automatisering
- Klassificeringssystem & standards behövs för att guida köpare och säljare av återvunnet avfall
- DPP kan få stor betydelse för avfallsortering
- Fler piloter och tester behövs!

Håll utkik!

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