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SYSTEM INNOVATION FOR
SUSTAINABLE DEVELOPMENT

IT Tools and Governance for Traceability (of Chemicals)

Meeting #4 | Subproject 2 | Julian Schenten, Eleni Kaluziak | 14.09.2022

**Innovative
Hochschule**



Bundesministerium
für Bildung
und Forschung



Deutsche
Forschungsgemeinschaft
DFG

Organisational matters



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Agenda and Goal of the Meeting

- (1) Vision for 2035: A system for traceability of (leather) chemicals
- (2) Input: Relevant legislative developments (linked to EU Green Deal)
- (3) Report on project activities / where we stand (governance framework)
- (4) Outlook



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Future perspective: Traceability as an enabling factor in 2035

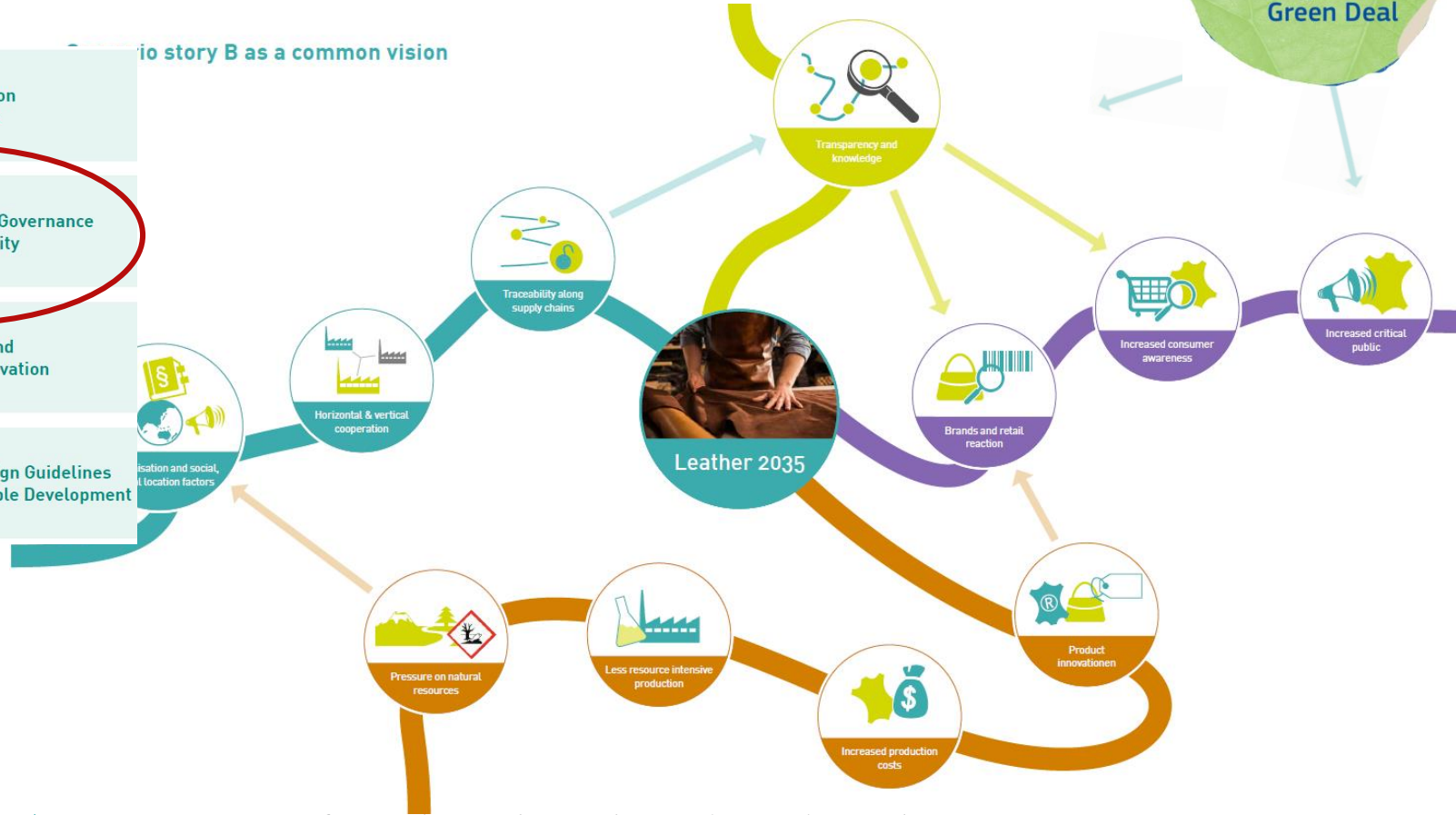


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Subprojects

- 1 Harmonisation of Standards
- 2 IT Tools and Governance for Traceability
- 3 Chemicals and Process innovation
- 4 Leather Design Guidelines for Sustainable Development



Subproject focus

to build a framework for the reporting of chemicals along the leather supply chains



Traceability of chemical substances along the supply chains
Know what substances are in your products (and processes)



Data basis provided by suppliers
Facilitated by IT tools and governance framework

Specific Objectives of Subproject 2

Among others:

- ✓ Have an **EARLY PILOT TEST** of such a system using an available system (also involve a tannery).
- ✓ **Initiate, i.e. create a momentum, for an international sector wide dialogue to define common rules for the application of such a system. Taking into account interlinkages with other initiatives and interoperability with existing approaches.**
(GOVERNANCE FRAMEWORK)



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Q&A



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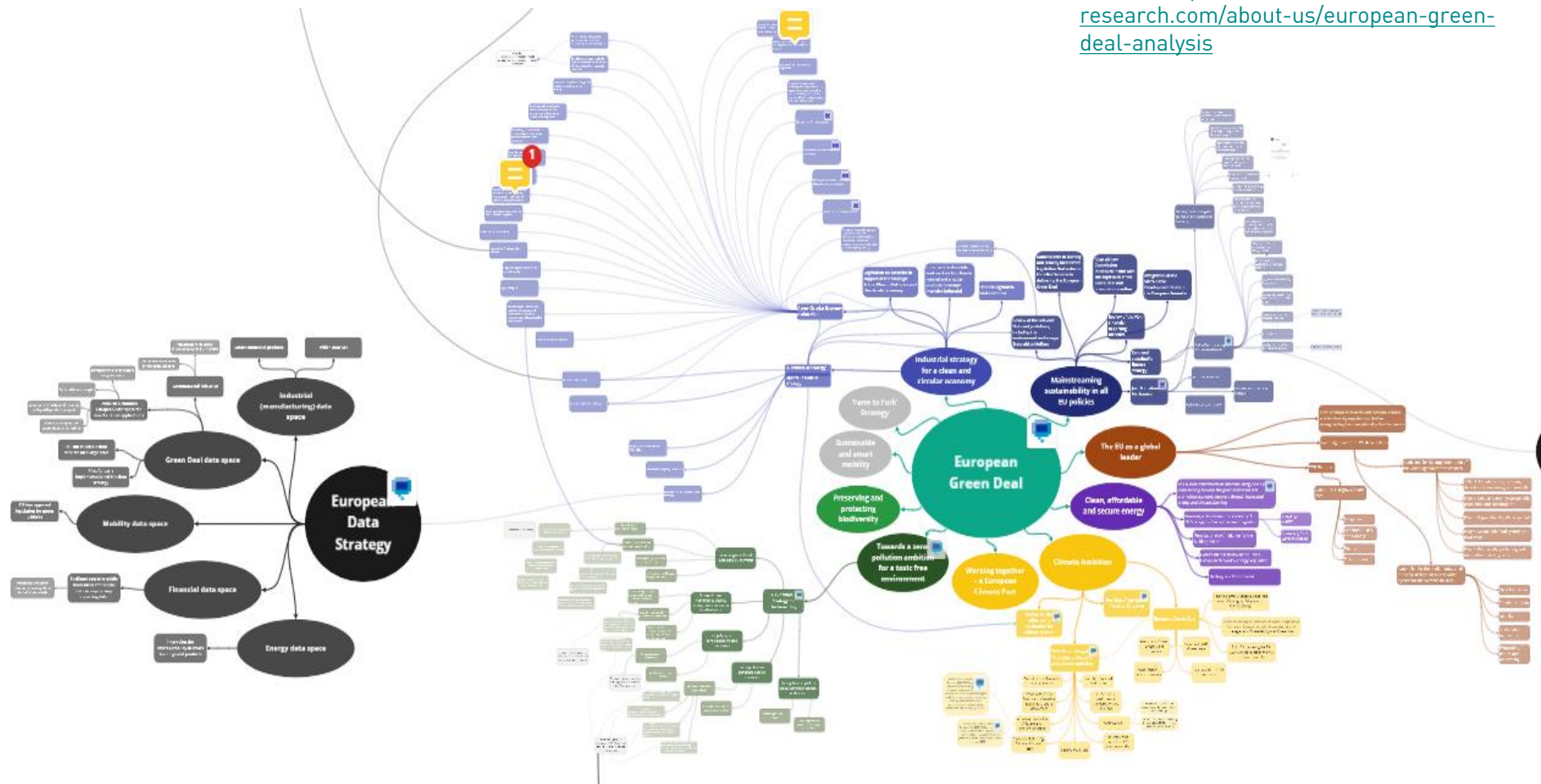
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Overview of Green Deal Policies

Source: <https://www.sofia-research.com/about-us/european-green-deal-analysis>



“It is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases **in 2050** and where economic growth is decoupled from resource use”

The transition towards a resource efficient “clean and circular economy” must avoid the contamination of material cycles by substances of concern (risk cycles)

Source: EU Green Deal, COM(2019) 640, p. 2 and 7

The CEAP therefore outlines measures aimed at “Enhancing circularity in a toxic-free environment, avoid toxic cycles”, including “harmonised systems to track and manage information on substances”

Source: COM(2020) 98, p. 17

Product policies are complemented by planned amendments in chemical policies, increasing the pressure to substitute SoC in products (general bans for consumer articles, only “essential uses” allowed, new SVHC categories...)

Source: COM(2020) 667

Chemical Substances in The European Green Deal



ESPR is one “Output” of the CEAP/ Sustainable Products Initiative (SPI); status: legislative draft by European Commission, 30 March 2022





Legislative framework for the adoption of product specific eco-design requirements („delegated acts“) while extending the scope of the eco-design framework to basically all physical products.

Recital 8 of the ESPR:

“ The European Green Deal also calls for the Union to better monitor, report, prevent and remedy air, water, soil and consumer products pollution. This means that chemicals, materials and products have to be as safe and sustainable as possible by design and during their life cycle, leading to non-toxic material cycles. ”

Art. 1(1)): Ecodesign requirements may aim at



- (a) product durability and reliability; 
- (b) product reusability; 
- (c) product upgradability, reparability, maintenance and refurbishment;
- (d) the presence of substances of concern in products;
- (e) product energy and resource efficiency;
- (f) recycled content in products;
- (g) product remanufacturing and recycling;
- (h) products' carbon and environmental footprints;
- (i) products' expected generation of waste materials.

However, any **information requirements** stipulated by a delegated act



„shall: (a) include, as a minimum, requirements related to the product passport referred to in Chapter III and requirements related to substances of concern” [...] (Art. 7 (2))

“shall enable the tracking of all substances of concern throughout the life cycle of products,”; name, location, concentration...(Art. 7(5))

Ecodesign for Sustainable Products Regulation (ESPR)



Introducing mandatory Ecodesign requirements

Product scope unclear: „Textiles ecosystem refers to textile, clothing, leather and footwear industries “

Introducing information requirements and a Digital Product Passport for textiles based on mandatory information requirements on circularity and other key environmental aspects.

“Clear, structured and accessible information on the environmental sustainability characteristics of products empowers businesses and consumers to make better choices and improves communication between actors along value chains, including producers and recyclers, for example on substances of concern, on repair or on the fibre composition. ” (p. 5)

Legislative developments (first in EU, drafts): Chemicals in products are getting into the focus, increasing information and transparency obligations (Digital Product Passport), relevance for leather

Substances of concern (SoC) that may adversely affect human health and the environment or that for other reasons impede circular economy business models are getting into the spotlight

Companies need to built up management capacities allowing them to control the chemicals in products that they produce and place on the market



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Feedback/Q&A



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How can we reach the Green Deal CE vision?



Participants

amfori, BUND e.V. ,
City of Stockholm,
EFIC, Eurometaux ,
European
Commission, IKEA
of Sweden, Inditex
S.A., LIST,
Competent
authorities in
Austria, France,
Germany, Sweden,
Orgalim, RISE, VDA

Results

Common agreement that traceability of chemicals in products along supply chains is key to achieve the goals to achieve the Green Deal vision for non-toxic climate neutral Circular Economy

Identified key policies/instruments to achieve traceability (and how they relate to each other)

Sector wide harmonised approaches +
capacity building are driving factors

Details: https://www.askreach.eu/wp-content/uploads/2022/08/AskREACH-Traceability-WS_HLResults_2022-07-22.pdf.



Figure 1: Documentation of some selected instruments

„Traceability“ Workshop in Brussels (May/June 2022)

	Study 1 (2021-1)	Study 2 (2022-1)
Data requestor	Ricosta	Deichmann
Data Supplier	Lederfabrik Heinen	Large manufacturer from India
Product	Leather material	Leather Shoe
Request type	Full material declaration (FMD)	FMD
Status	Completed	Pending

s:ne Structure tree from „Ricosta“ pilot study

MC

Material Compliance

LIFE ASK REACH

LIFE16 GIE/DE/000738
LIFE ASK REACH

Dashboard

Anfragen von Kunden

Anfrage-Details

Produktdeklaration

Kontaktdaten

Dokumente anhängen

Ein neues homogenes Material hinzufügen

Autom. Speichern

NAME	INFO	GEWICHT	KONZENTRATION	CAS-NR
Product name		deklariert: 14,577g / 30g	deklariert: 48,59%	
Leder		deklariert: 14,577g / 30g	deklariert: 48,59%	
▲ Reactior		0,486g	1,62%	
▲ 2-(2-But		4,2g	14%	112-34-5
▲ Natriuml		0,021g	0,07%	1310-73-2
▲ C.I. Acid		1,95g	6,5%	12270-00-7
▲ 1-Metho		3,15g	10,5%	107-98-2
▲ Ameiser		4,5g	15%	64-18-6
▲ Tetranat		0,21g	0,7%	64-02-8
▲ Glycine,		0,06g	0,2%	3624-77-9

Substances

Weight

Concen-tration

CAS-Nr.

Produkt bearbeiten

Typ: * Halbzeug

Produktname: * Product name

Produktnummer: * 028400/4214/14

Menge: * 0,03 Quantity m³

Gewicht: * 30 Weight g

UNITs

Ausnahmen

Angefragte Regularien: REACH-Annex XVII, SVHC material, REACH Annex XVII, REACH Annex XIV

REGULARIUM	NUMMER	BESCHREIBUNG
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Hinzufügen

Entfernen

Potentials (mid-term)

Know chemicals in products (and materials)
Compliance and beyond compliance
Customer satisfaction
Supplier (risk) evaluations
Linked with in-house systems
Cover other sustainability related info
Cost savings in the long-term
Added value to existing initiatives

Work shows technical feasibility of approach

Overall positive experiences from users

Challenges (today)

Lack of data on chemicals / compositions hinder FMD
Lack of knowledge (e.g. chemistry washed out)
Lack of standards (e.g. sqm to kg)
Lack of trust
Lack of business models
Lack of IT capacities
Burdensome

Pilot study main findings (incl. discussions from WS)

A commonly agreed set of rules will reduce challenges

- Scope of framework (\rightarrow *Survey*)
- Define roles of actors
- Scope of reporting (\rightarrow *Survey*)
- Reportable units
- Data quality and reliability
- Research roadmap
- Data formats (xls, xml)
- Supplier support
- Governance of the process

Legislative developments (first in EU): Chemicals in products are getting into the focus, increasing information and transparency obligations (Digital Product Passport), relevance for leather

Product Policy Experts from industry and administration identify traceability as prerequisite for the Green Deal transition

Traceability of chemicals in leather products along supply chains identified as leverage point for more sustainable leather chemistry in 2035

Technical feasibility tested, important to initiate governance process

The sector needs to engage, get productive before it is presented with a fait accompli



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Backup