

ECHT

Circular Economy Policy Making for Traceability of Chemicals along Value Chains

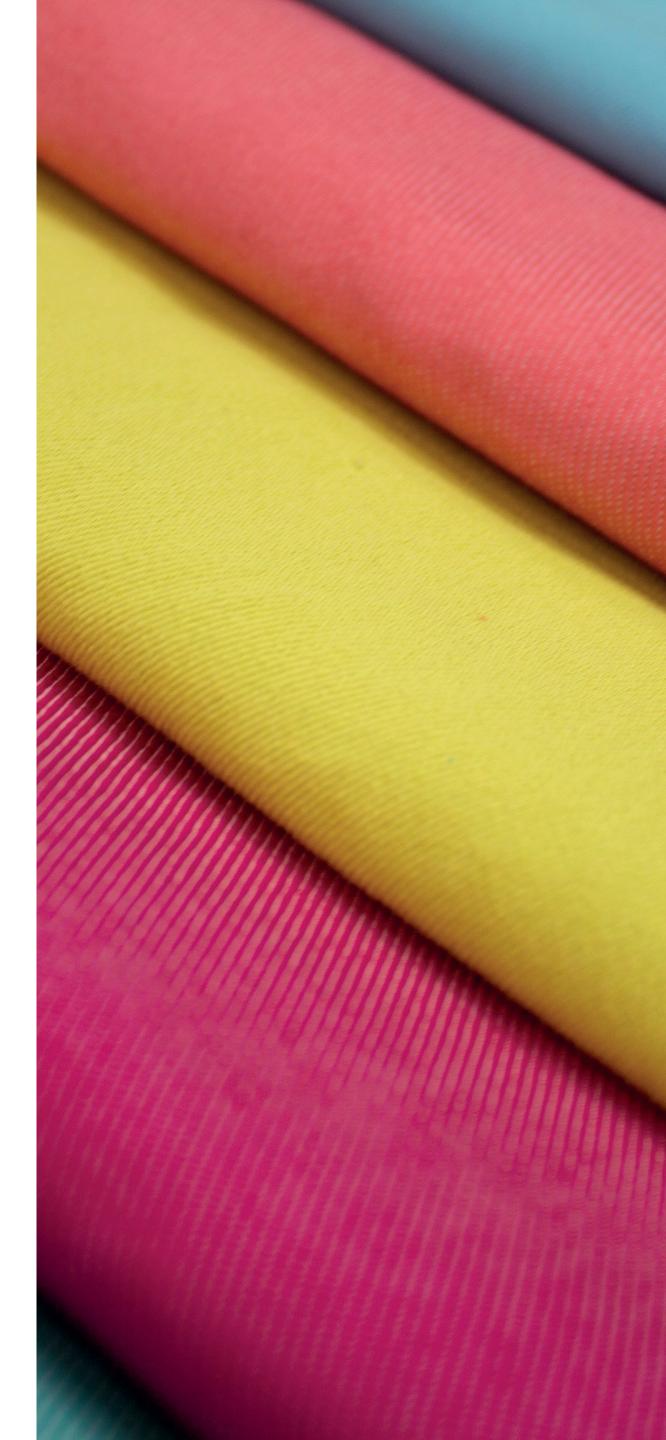
15th of October 2024 | Brussels





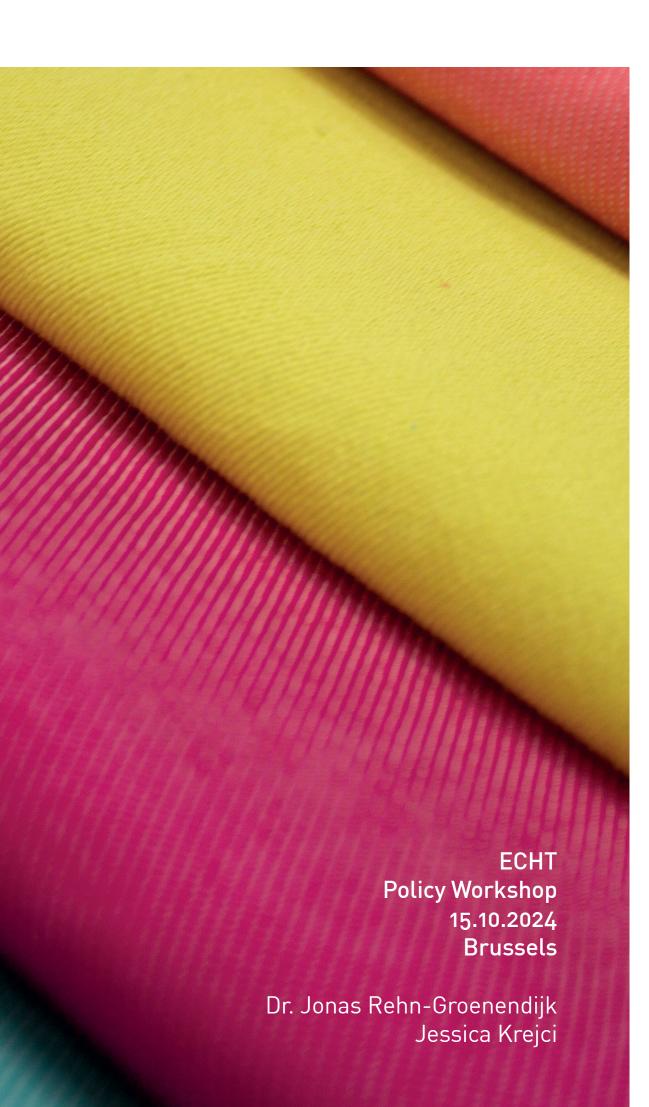








ECHT



Agenda

Opening

Overview on regulatory landscape - Dr. Ioannis Dosis & Eva Becker (UBA)

IMPULSES I

Coffee Break

IMPULSES II

Insights from ECHT project - Dr. Jonas Rehn-Groenendijk (h_da)

Lunch / Networking

WORKSHOP PART I - World Café

Coffee Break

WORKSHOP PART II - Presentation and discussion

Future Outlook - Prof. Dr. Martin Führ (h_da)

Closing remarks - Dr. Ioannis Dosis (UBA) and Dr. Jonas Rehn-Groenendijk (h_da)

Reception with Drinks / Networking

End of event at 19:30

Welcome

Johannes Bade

Head of Unit Science and Research, Arts and Culture Representation of the State of Hessen to the European Union



Opening

Dr. Ioannis Dosis (UBA)

& Dr. Jonas Rehn-Groenendijk (h_da)



- Duration 2024-2026
- ca. 2 Mio € Budget





Enable Digital Product Passports with Chemicals Traceability for a Circular Economy

8 Project Partners

GUT

















11 Associated Organisations









Other

Organisations

involved







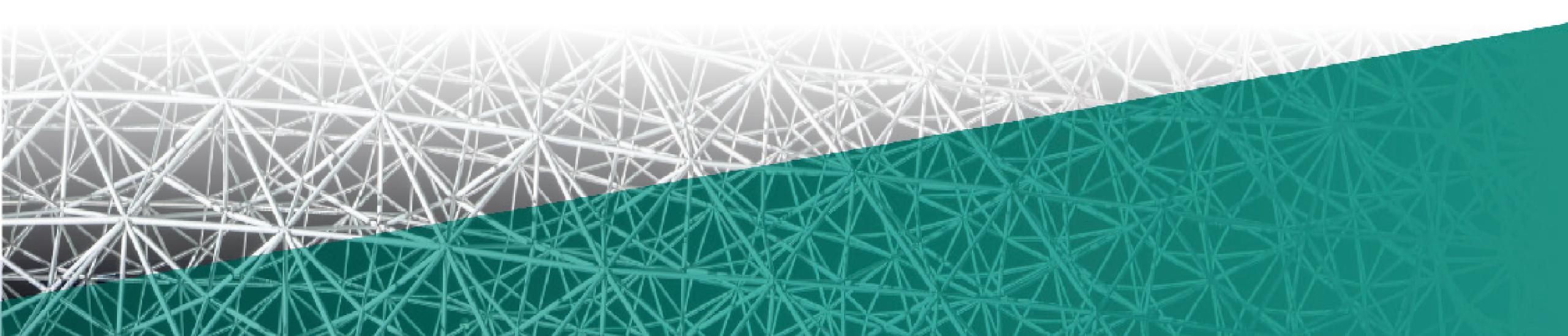


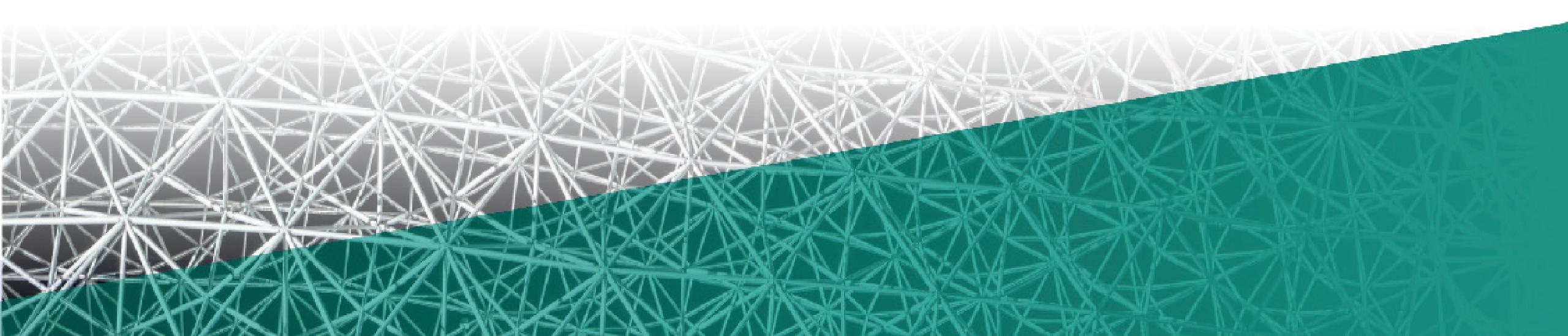


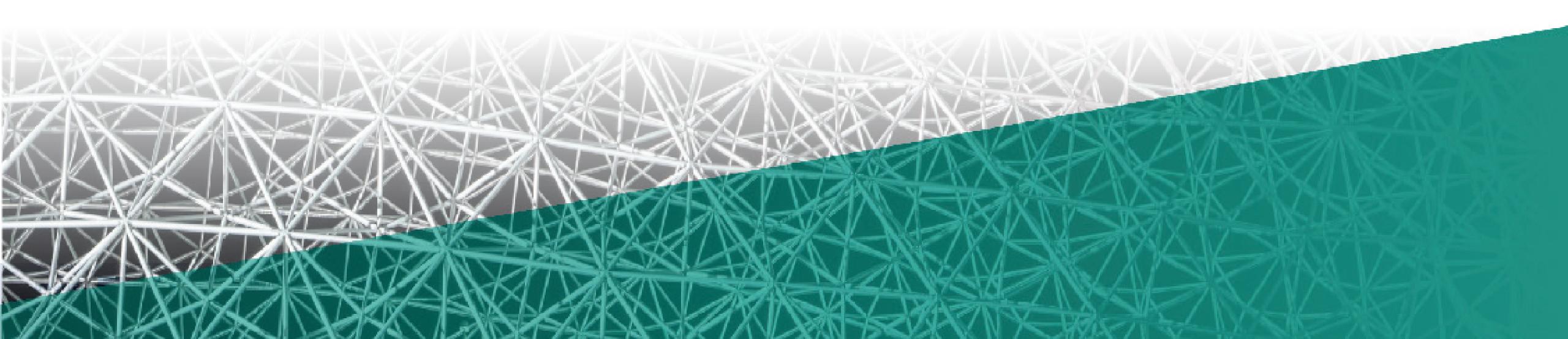


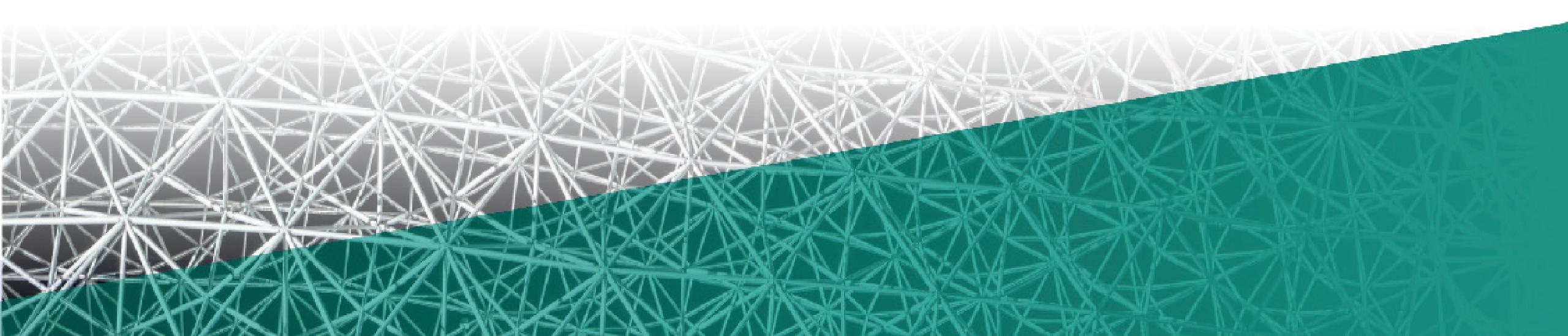




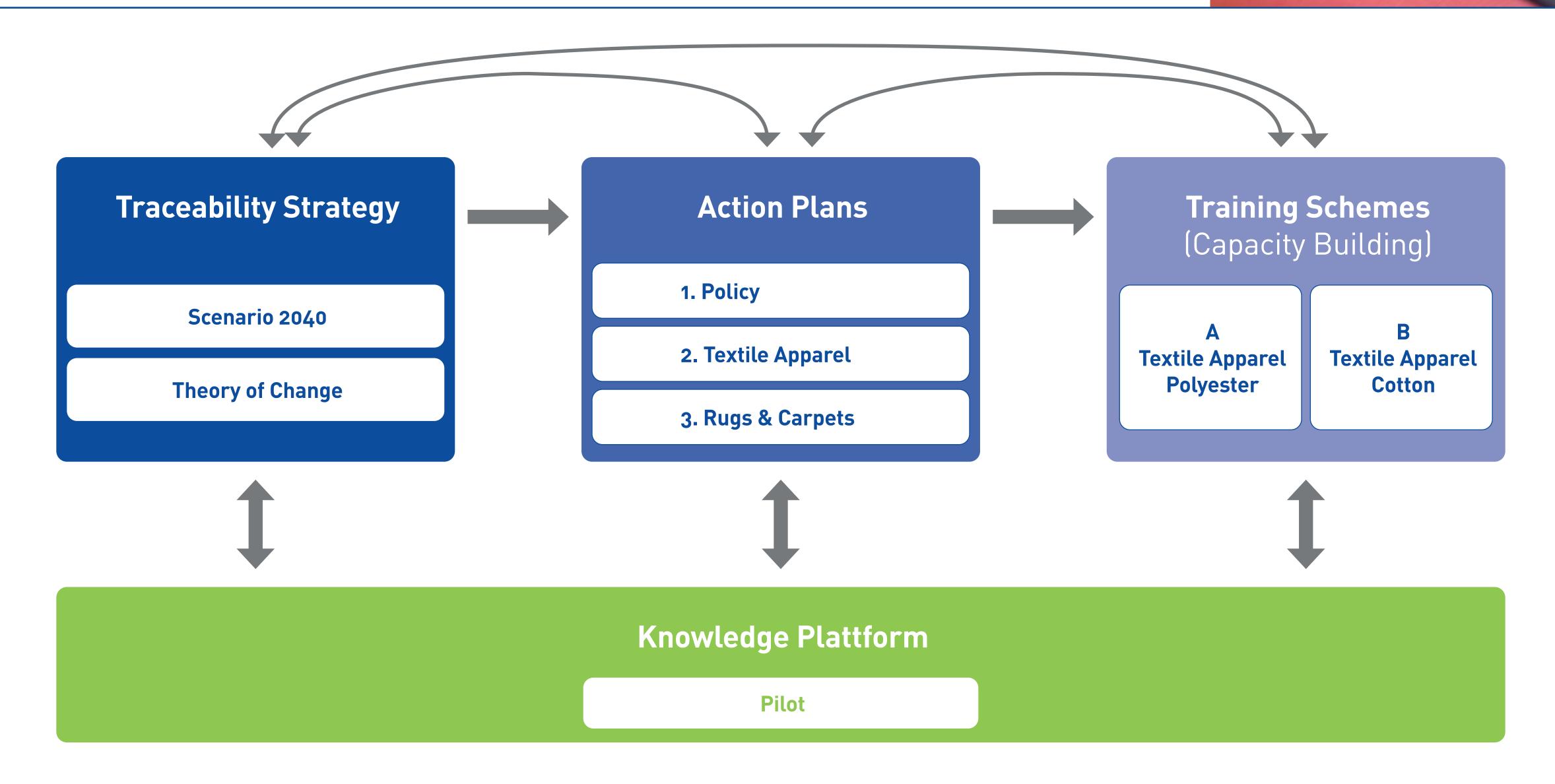






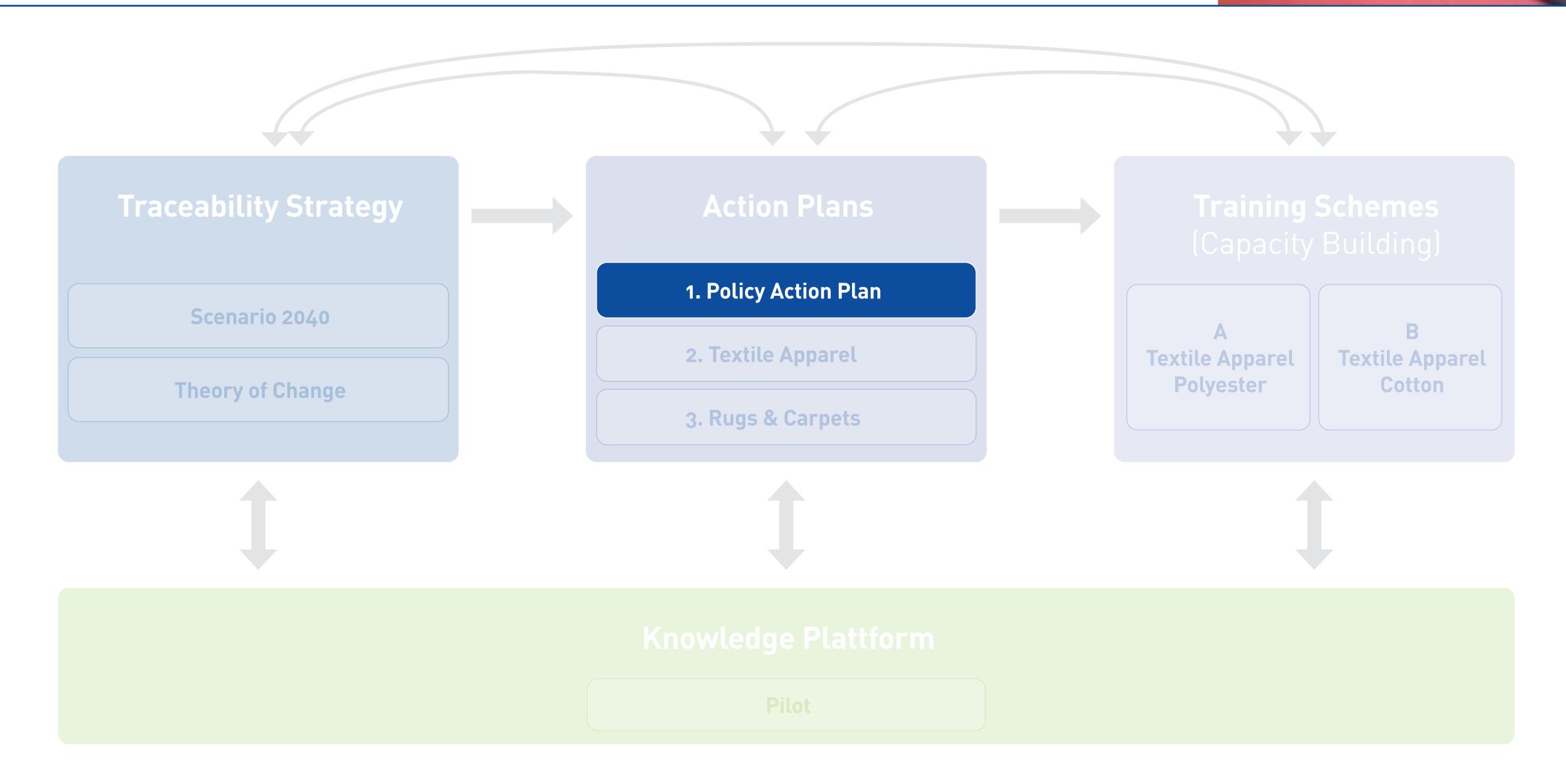


ECHT - Project Structure





ECHT - Project Structure





Impulses

- Dr. Julian Schenten | Client Earth
- Dr. Dorota Napierska | Zero Waste Europe
- Sidsel Dyekjær | ChemSec





ECHT

Circular Economy

Policy Making for Traceability of
Chemicals along Value Chains

15th of October 2024, Brussels



Coffee...



Impulses

Adrian von Mühlenen BASF

Charles Graf Sympany

Clara Hedström Cortinovis | H&M





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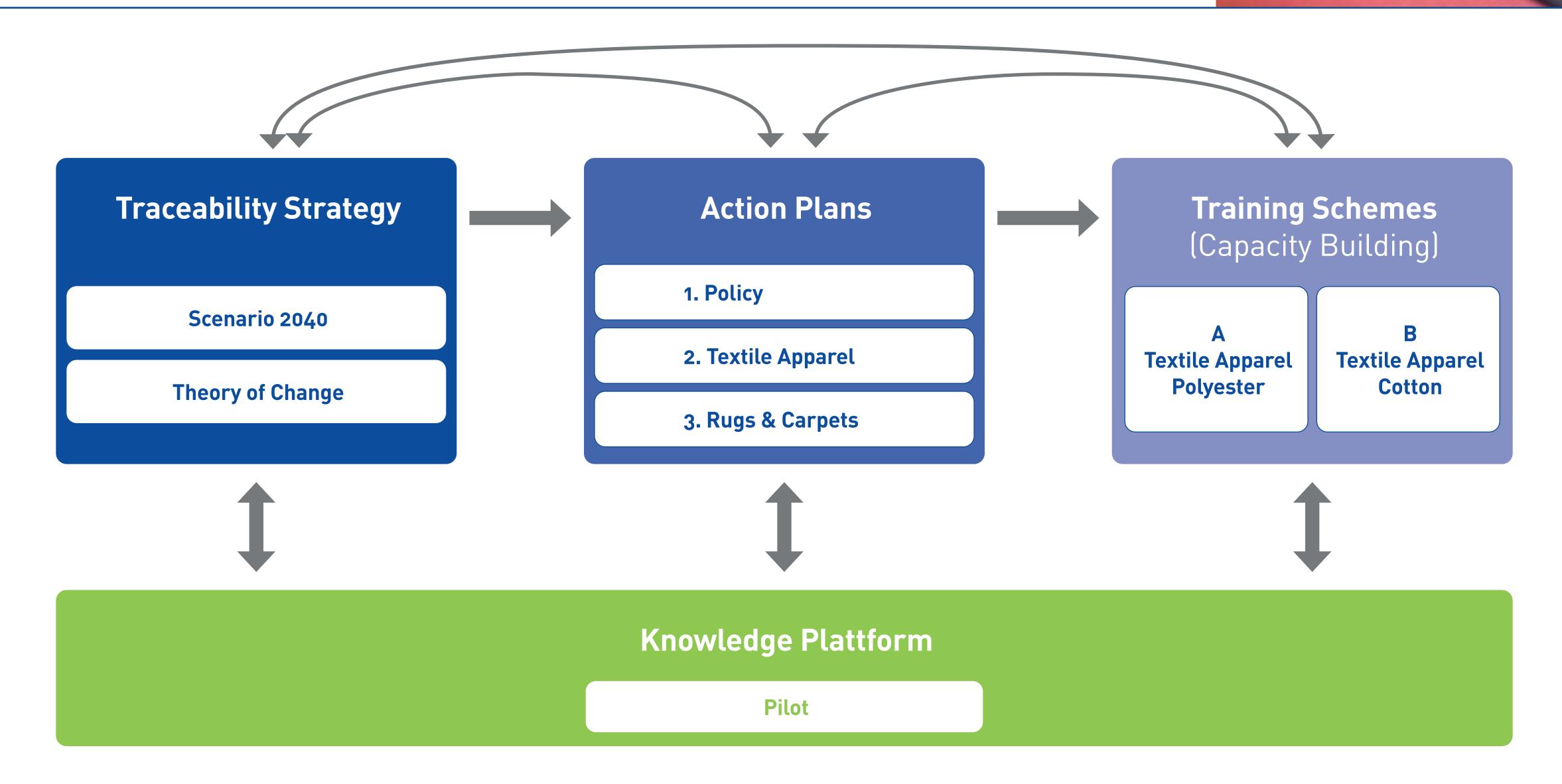
Transdisciplinary EU-Project

Enable Digital Product Passports with Chemicals Traceability for a Circular Economy - ECHT

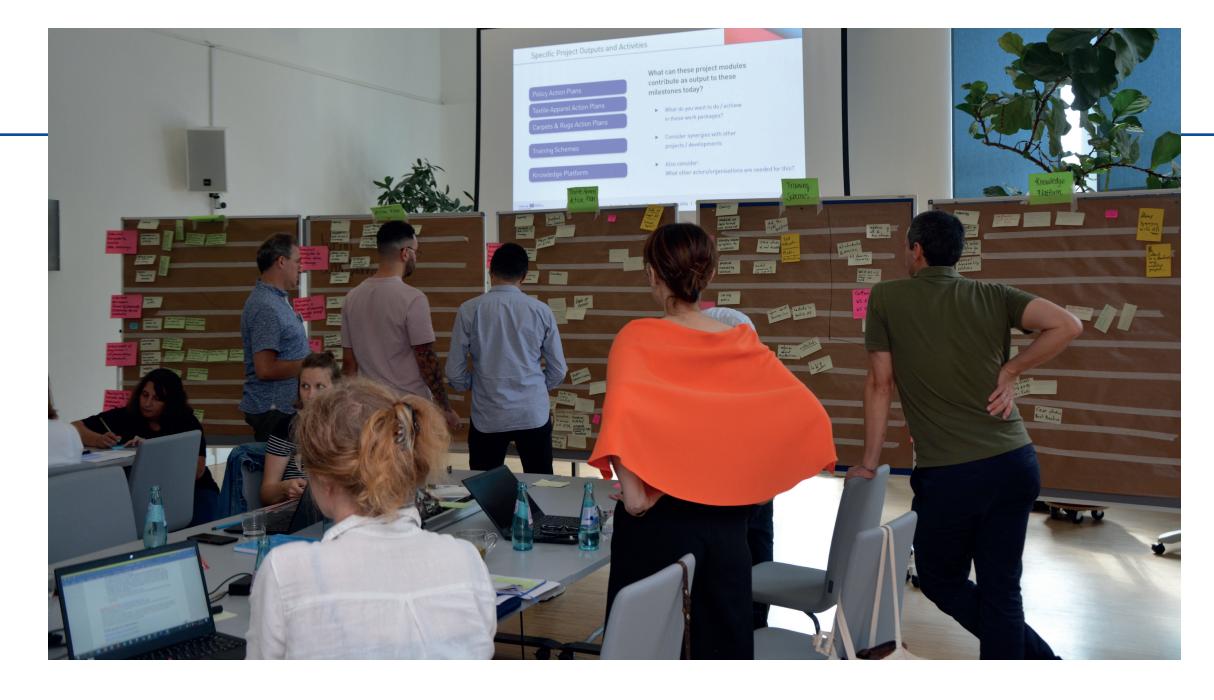
Dr. Jonas Rehn-Groenendijk & Jessica Krejci Policy Workshop | 15.10.2024 | Brussels



The Project

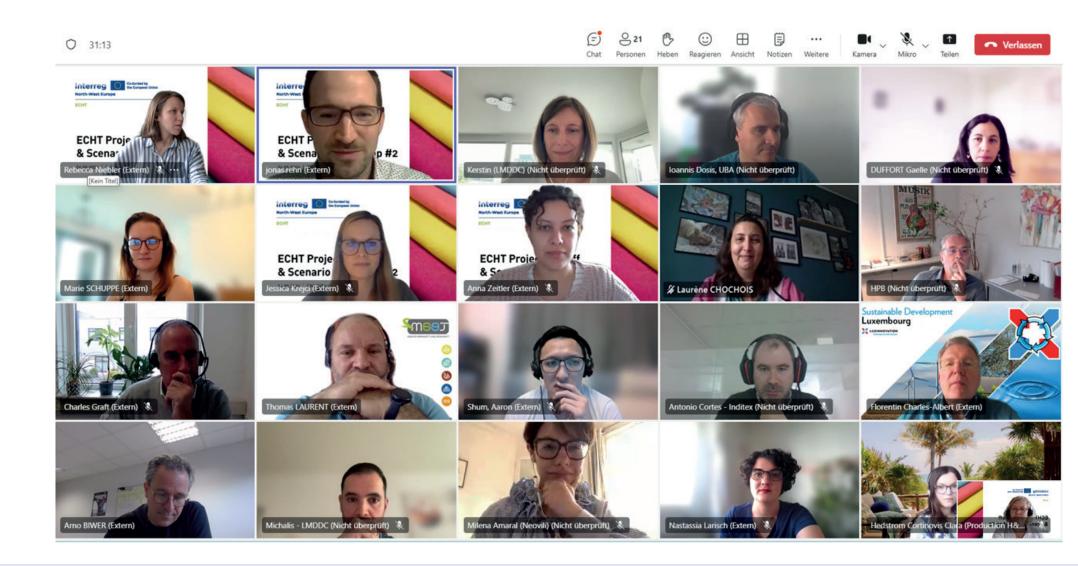




















INFLUENCING FACTORS





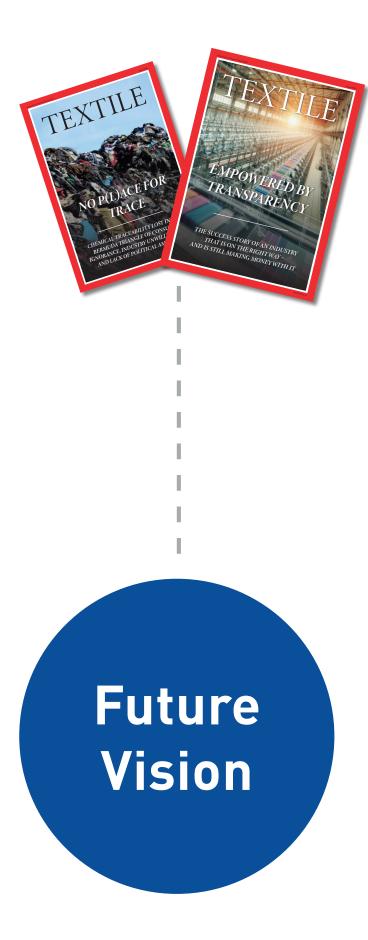


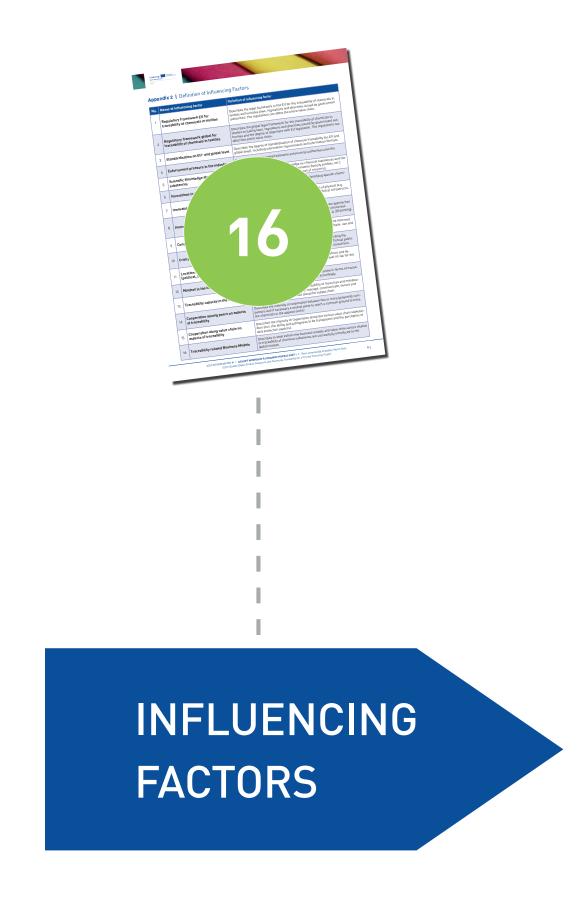








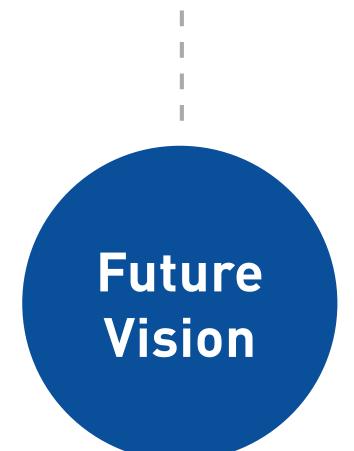






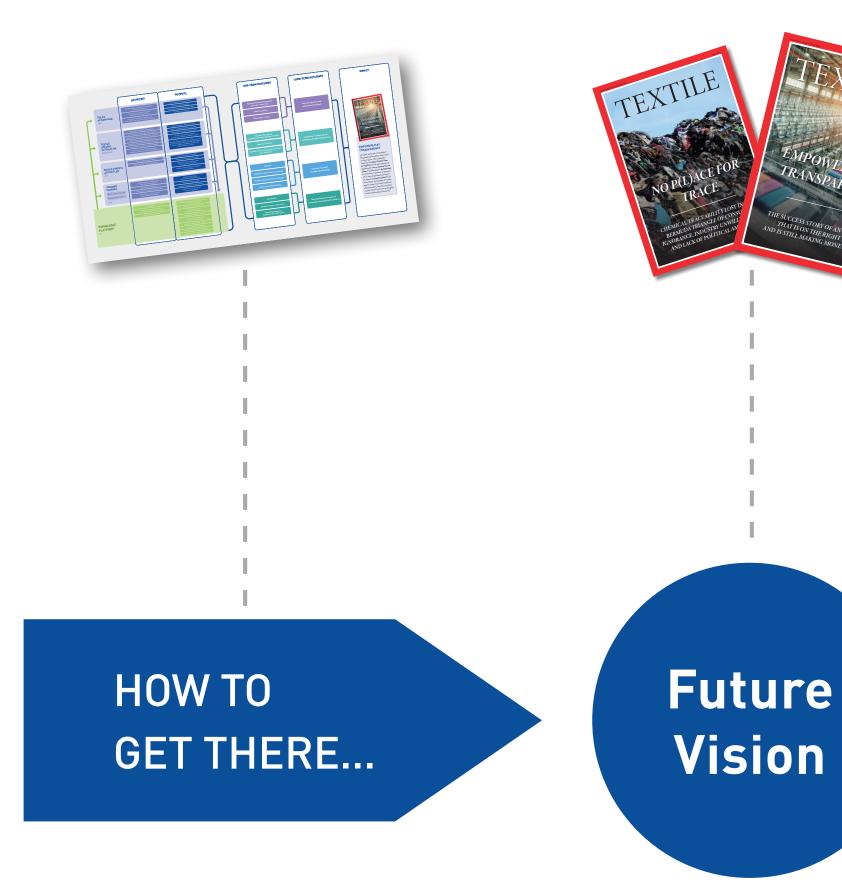
Traceability of
Chemicals in
Global Textile Apparel
Value Chains
in 2040

HOW TO GET THERE...









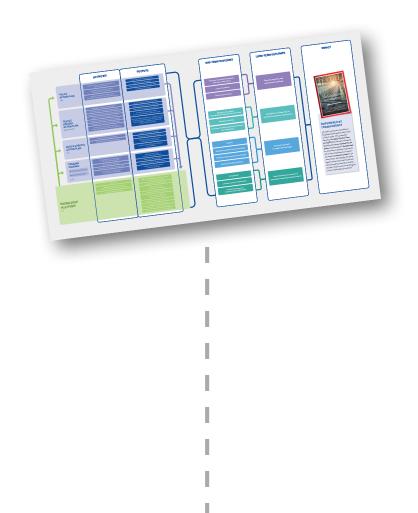




INFLUENCING FACTORS



Traceability of
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in 2040



HOW TO GET THERE...



Future Vision



https://echt.nweurope.eu/outcomes







Traceability of
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in 2040





Future Vision



Scenario Story 1

Empowered by Transparency

The success story of an industry that is on the right way – and is still making money with it

BY ECHT PROJECT CONSORTIUM

N 2040, CHEMICALS TRACEABILITY IN THE GLOBAL TEXTILE APPAREL VALUE CHAIN IS FULLY IN PLACE. This is possible thanks to the Digital Product Passport (DPP) that has been introduced globally and expands beyond the use phase of textile apparel. Reliable data on chemicals in products and processes is now recognised as an important aspect of business models in all value chains. Accordingly, the textile apparel value chains have made significant progress towards a nontoxic, climate-neutral, resource-preserving circular textile apparel economy.

Someone has to make a start

The starting point for this transformation was an active, critical public: concerned citizens, supported by NGOs, were increasingly informed about the dangers of hazardous chemicals for humans and nature and questioned the safety of textile apparel products they currently bought and used. 2026 marked the turning point and led in subsequent years to a continuous shift in consumer behaviour that demanded more substantiated information and, as a result, significantly extended the use phase of their textile apparel products.

At the same time, EU regulations on traceability and transparency were tightened, which include specific obligations to report substances in products and processes. Sanctions were imposed for non-compliance. Due to the globalisation of markets and, above all, the work in several projects and initiatives (e.g. UNEP, ZDHC), there has been a corresponding increase in harmonisation of other legal frameworks worldwide, which use EU regulations as a model.

In the EU in particular, strategies such as the "Green Deal" and its associated actions plans (regulations, directives, etc.) were largely enforced by national administrations, while public authorities cooperated effectively, creating significant pressure – and reassurance – on industry actors, who gradually changed their mindset and ensured greater transparency and a level playing field. A growing consumer awareness for more sustainable consumption, which enables corresponding business models, has clearly supported this. As a result, both the textile and chemical industries as well as related industry actors invested substantially in traceability capacities (both human resources and infrastructure).

STEPS ALONG THE WAY

Against the background of this development, new structures for acquisition and dissemination of scientific knowledge of chemical substances







(including toxicity profiles) were created with the support of the chemical industry, which led to a significantly higher knowledge output and uptake from academia and industry.

Actual traceability was enabled and realised due to several factors: The first cornerstone were global, industry-wide traceability standards driven by industry actors on issues such as data, information provision, formats and data protection. This has been supported by continuous innovation in traceability technology that eventually had specific requirements which could be applied to efficient development processes. In line with industry demand, an efficient global infrastructure for traceability was created through standardised processes and formats as well as innovations in new business models and services. In practice, this window of opportunity was utilised by first movers who had prepared their value chains accordingly (data readiness). Industry associations and cooperations such as ZDHC supported the distribution of these best practices and the establishment of industry-wide rules that recognized the overall benefits of cooperation both within value chains and among peers.

The guide to success

The chemical industry was involved in every step of this process and was included in a feedback loop of information provision and product demand. The chemical industry actors that provided sufficient information about their chemical products, while ensuring high quality of data, had a market advantage as the textile industry depended on access to this information. A key to this system was the global introduction of the Digital Product Passport (DPP), which is both a physical (tracking technology) and a non-physical entity that expands beyond the use phase.

Finally, the global business ecosystem of chemical and textile companies has recognised traceability as a driving force for both financial success and environmental protection. Greater transparency enabled fairer markets and encouraged the trend towards more globally balanced location factors. While legislation initially was one of the primary drivers, the process has evolved naturally involving more and more stakeholders. This success story is not an end in itself, but continues to serve as a driver for all in the textile apparel value chains and as an inspiration for neighbouring sectors. Because in the end, the goal is a truly circular economy.

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or 2040 as result of the ECHT research project | © Darmstadt University of Applied Sciences 2024

Fictional scenario story for 2040 as result of the ECHT research project | © Darmstadt University of Applied Sciences 202



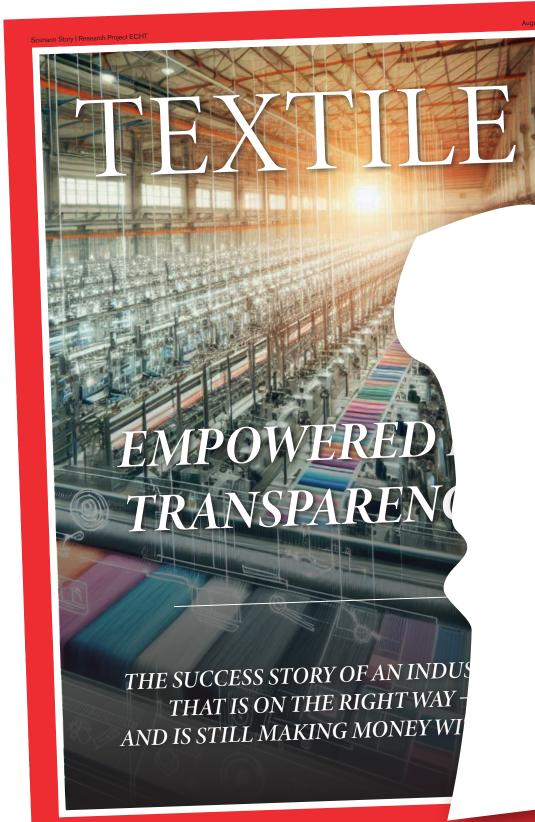
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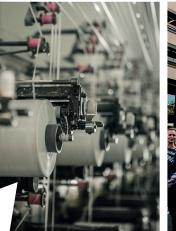
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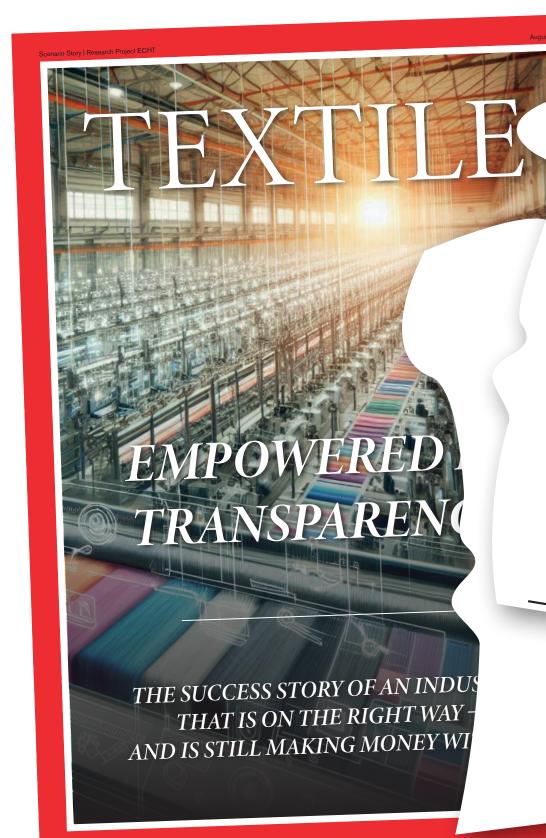
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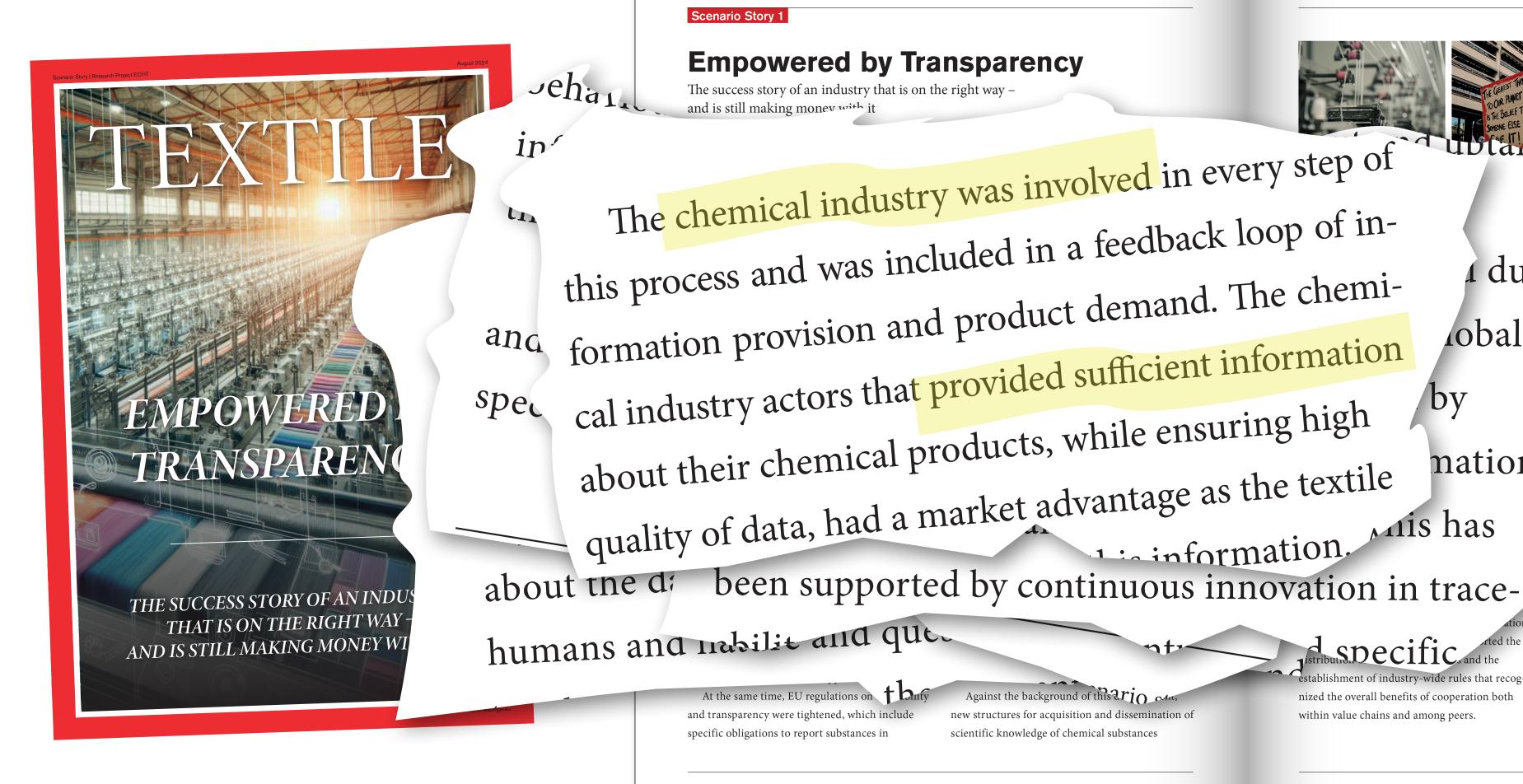
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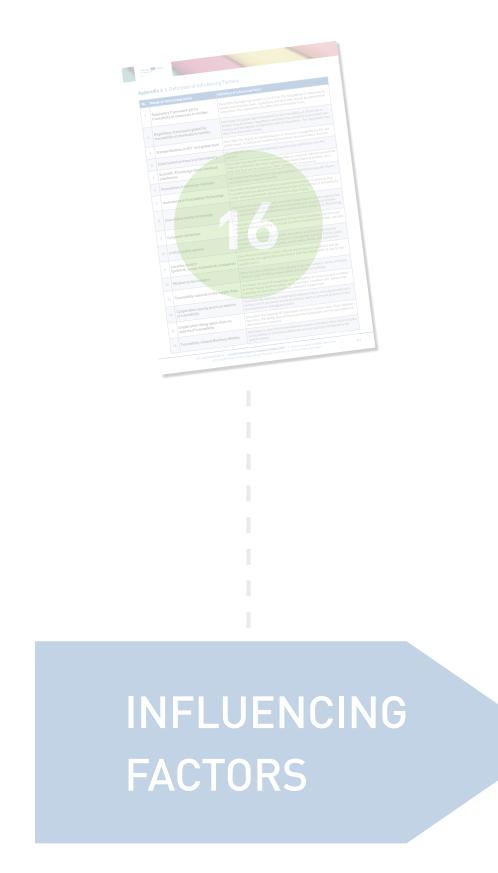
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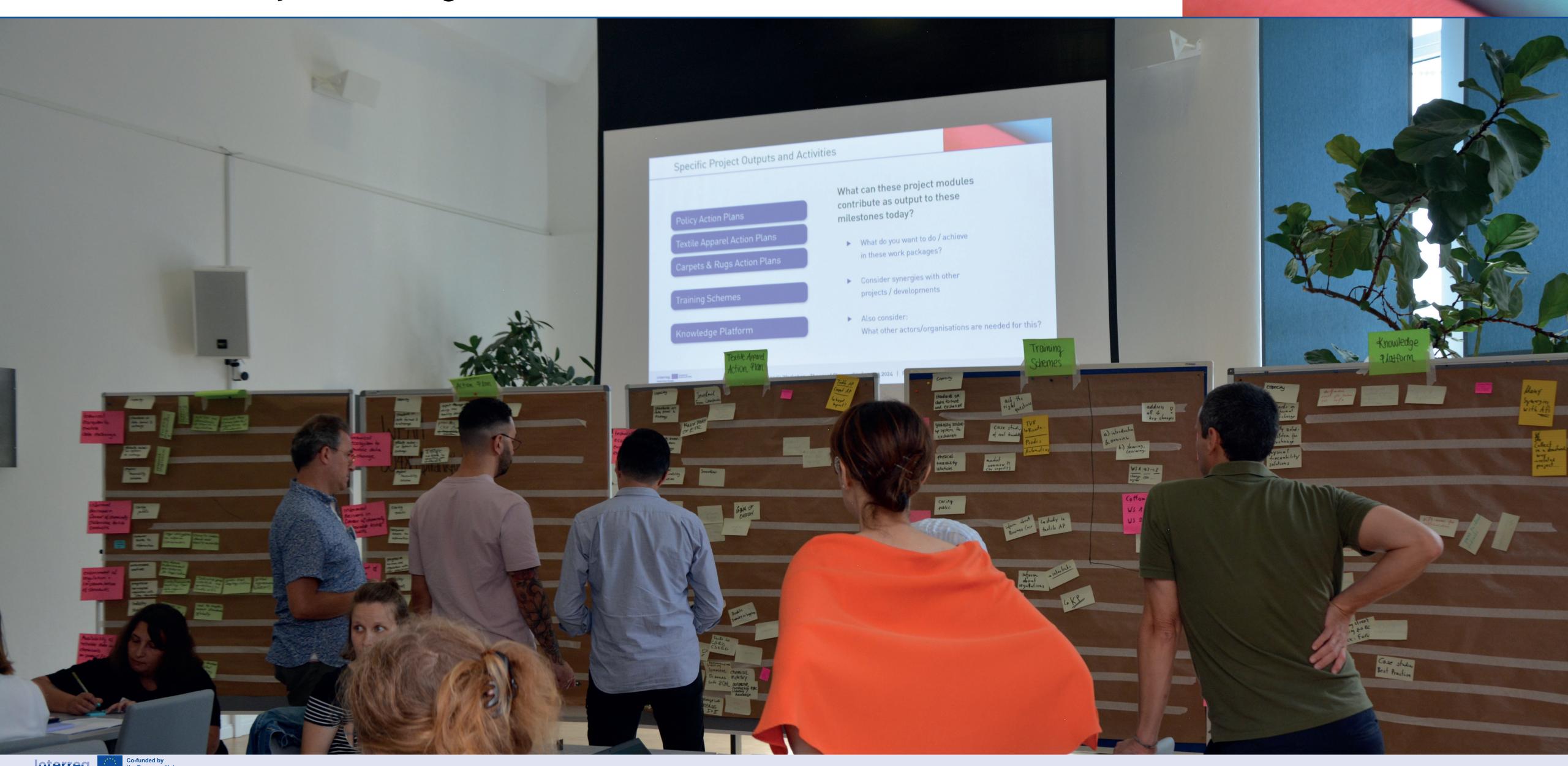








2.1. Theory of Change



North-West Europe





IMPACT



EMPOWERED BY TRANSPARENCY

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THEORY OF CHANGE: TRACE

Enforced regulation and implemented standards

LS IN TEXTILE VALUE CHAINS IN 2040

Availability of reliable data on chemicals in products and processes

Technical ecosystem to enable data exchange

Informed decisions in favour of chemically sustainable textile products

LONG-TERM OUTCOMES

Enforced regulation and implemented standards

Availability of reliable data on chemicals in products and processes

Technical ecosystem to enable data exchange

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information visit: https://echt.nweurope.eu/



THEOR

Progressive harmonised regulation with clear requirements

Industry standards

Enforcement routines

Mindset in the industry (traceability & substitution the new norm)

Obligation to declare

Standards of disclosing chemical formulars (incl. which data)

Capacity

Standards on data format and exchange

Globally scaled-up system for exchange

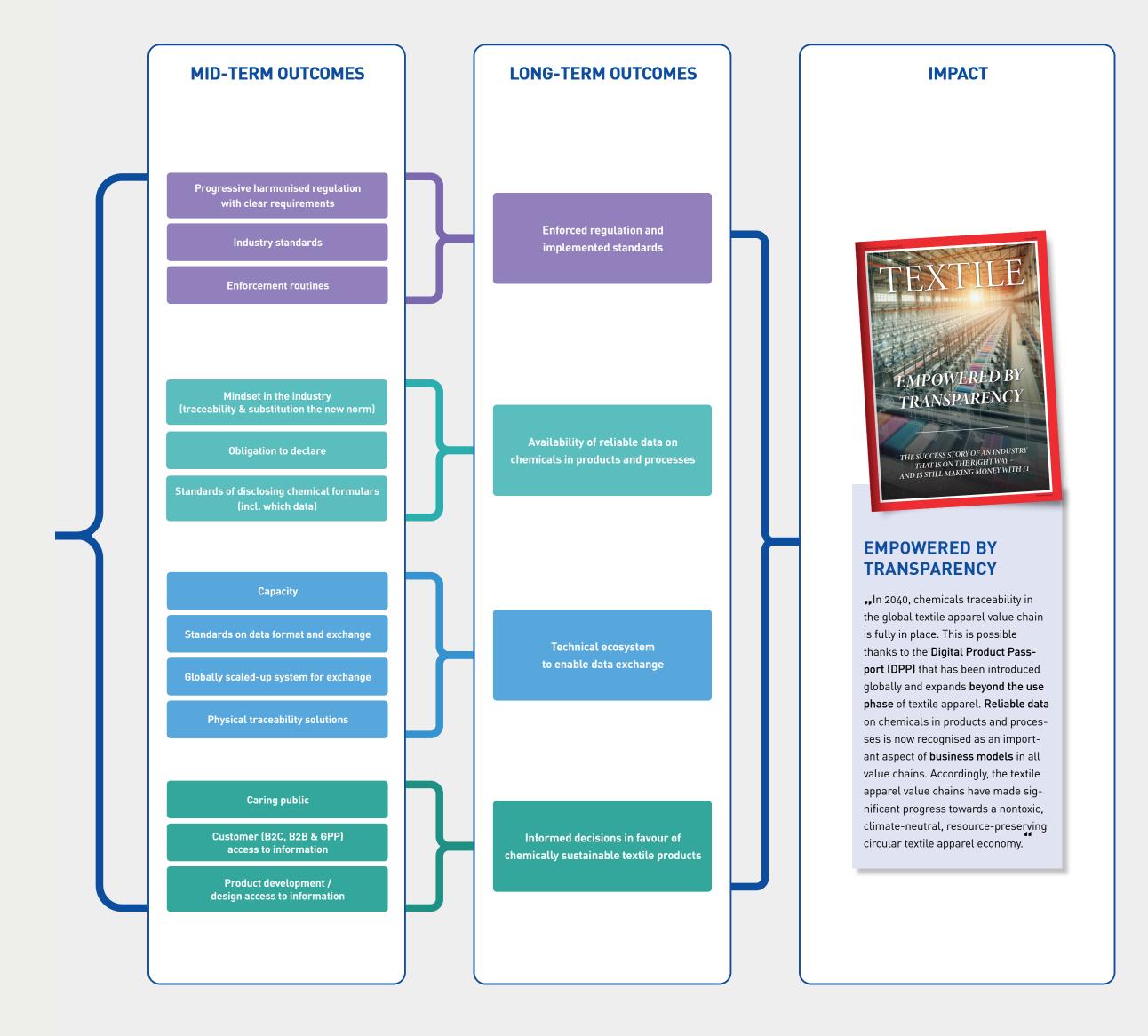
Physical traceability solutions

Caring public

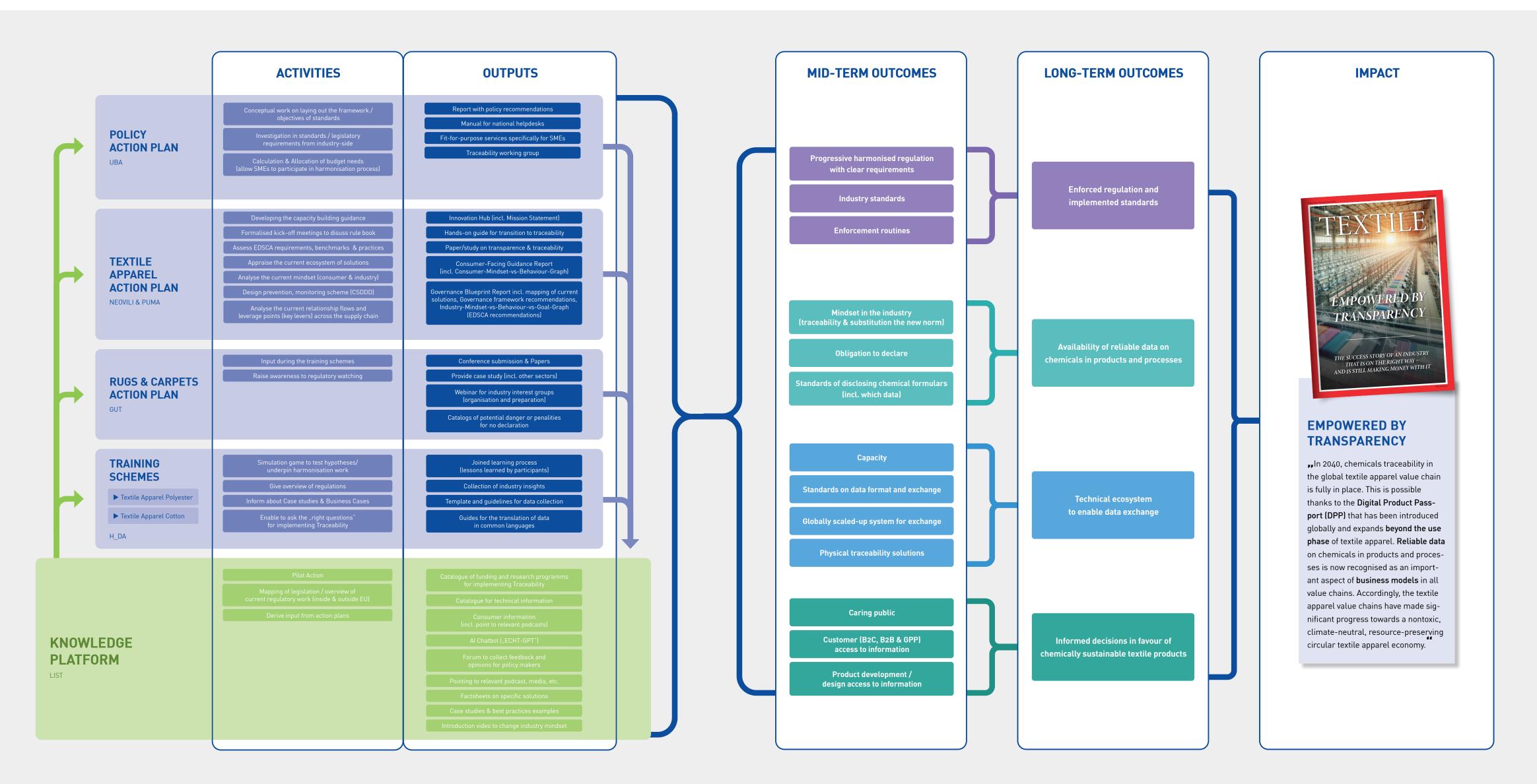
Customer (B2C, B2B & GPP) access to information

Product development / design access to information

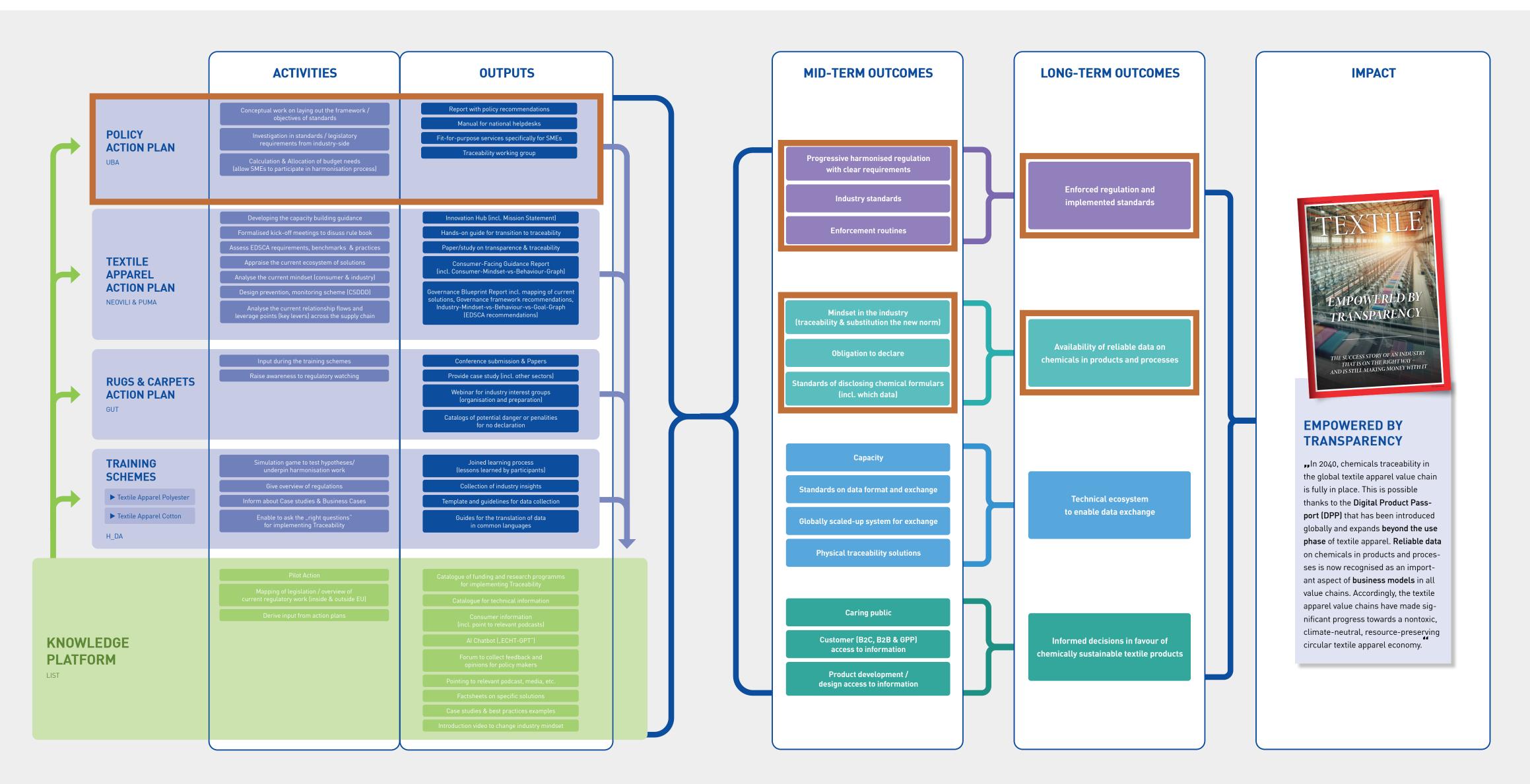
EABILITY OF CHEMICALS IN TEXTILE VALUE CHAINS IN 2040













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Circular Economy

Policy Making for Traceability of
Chemicals along Value Chains

15th of October 2024, Brussels



LUNCH...

Workshop PARTI Workshop PARTI Workshop PARTI Café

Table 1: Defining Essential Information for Effective Chemicals Traceability

Moderation: Dr. Julian Schenten (ClientEarth)

Table 2: Legislative Harmonization and Policy Gaps at the EU Level

Moderation: Dr. Arno Biwer (Luxembourg Institute of Science and Technology - LIST)

Table 3: Support Mechanisms and Value Chain Engagement

Moderation: Milena Amaral (Neovili)

Table 4: Global Cooperation and International Standards

Moderation: Dr. Ioannis Dosis (UBA)





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25min Aper Table





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Coffee...



Workshop PART II Reflexion & Discussion



► Future Outlook

Prof. Dr. Martin Führ

Darmstadt University of Applied Sciences (h_da)



Closing Remarks

Dr. Ioannis Dosis (UBA)

& Dr. Jonas Rehn-Groenendijk (h_da)



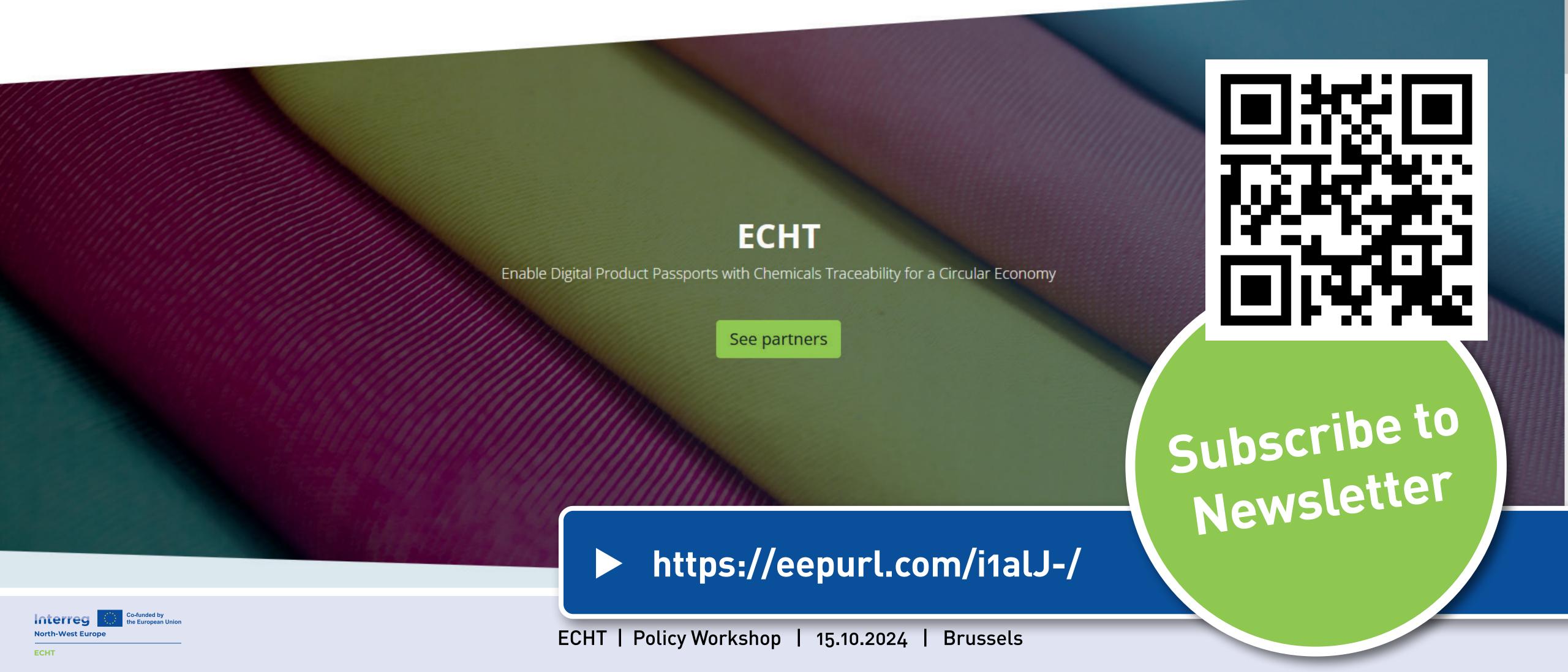


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Outcomes



Scenario stories

The scenario stories are a short story that describes the vision created during the scenario proceaimed at understanding and identifying the specific impacts of influencing factors.

Access to the scenario stories



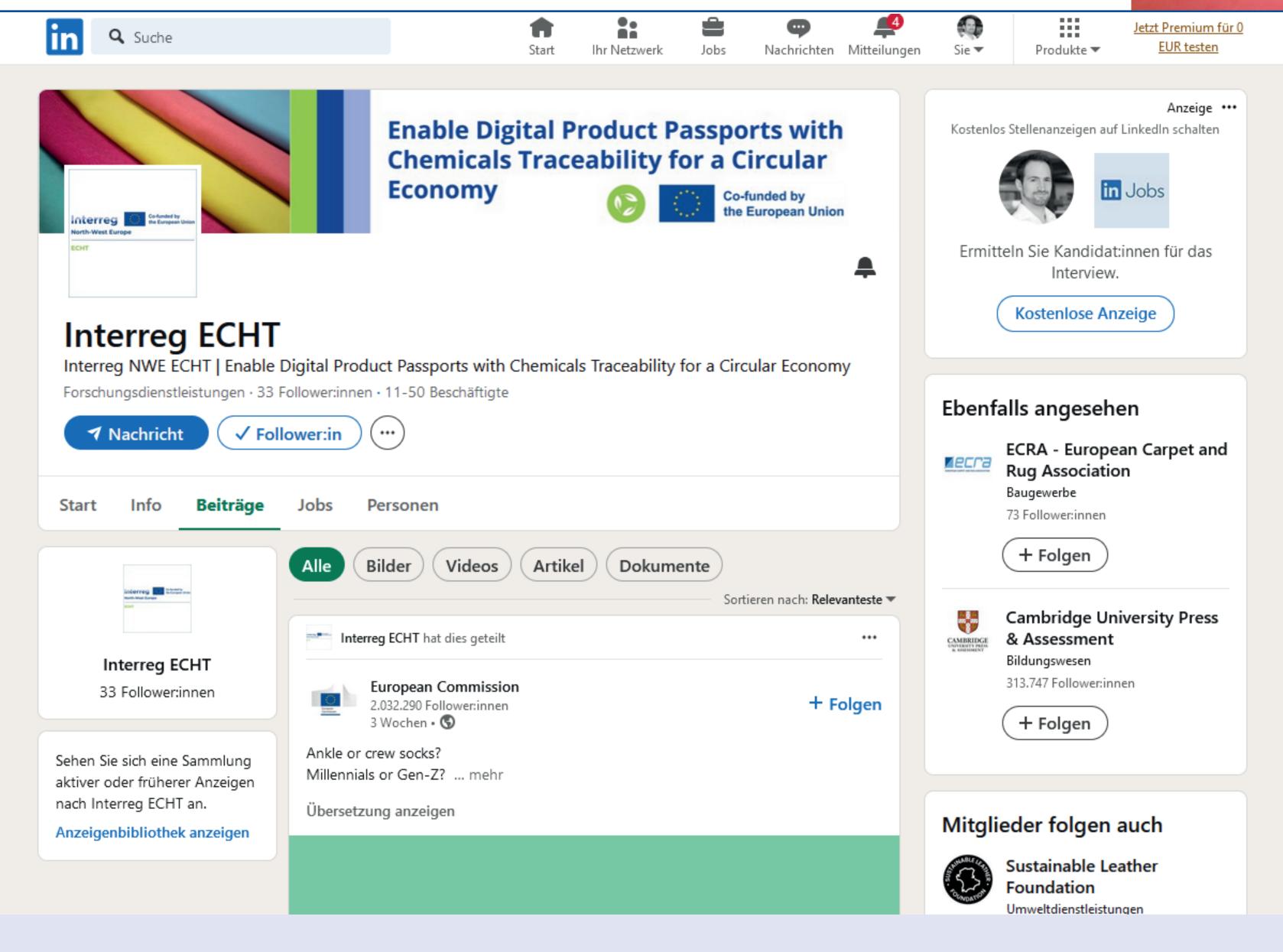
Scenario stories

https://echt.nweurope.eu/outcomes

all project outputs outputs available online



Linkedin





ECHT

Thank you for your participation!

- https://echt.nweurope.eu/
- ioannis.dosis@uba.de (Policy Action Plan)
- jonas.rehn@h-da.de (Project)

