Product DNA

DIGITAL PRODUCT PASSPORT

Best Practices | Critical Insights | Evolving Demands

DPP

Textiles

THE PRODUCT IDENTITY

Just like vehicles need license plates to be on the road, every product should have its own **unique identifier** to circulate in the market.

Just as a passport confirms a person's identity, every product needs a **unique identifier** to be recognized in the marketplace.

THE DIGITAL PRODUCT PASSPORT IS A LEGALLY REQUIRED, ELECTRONIC DOCUMENT THAT RECORDS A PRODUCT'S SUSTAINABILITY AND CIRCULARITY FROM ITS DESIGN THROUGH TO ITS END OF LIFE.

WHAT DO WE KNOW SO FAR?

THE LEGAL FRAMEWORK

DPP is part of The Eco-design for Sustainable Product Regulation (ESPR).
The ESPR proposes a creation of DPP to electronically register, process and share product-related information amongst supply chain businesses, authorities, and consumers.

THE GOALS

- Enhance sustainable production
- Extend product lifetimes
- Optimizie product use
- Support consumers in making sustainable choices
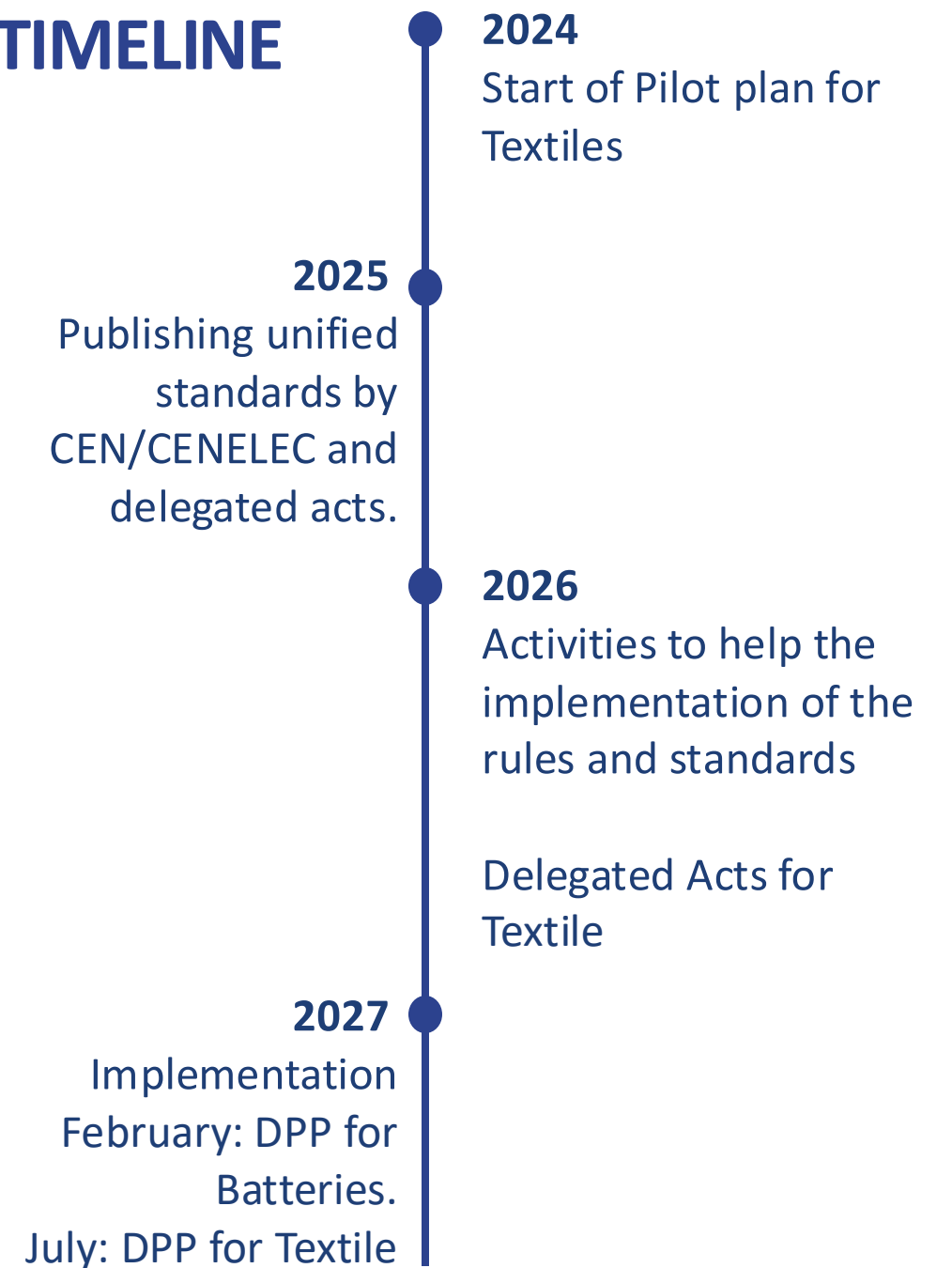- Enable compliance verification for authorities

THE ROLE

DPP is not designed to replace but complement non-digital forms of transmitting information such as information in the product manual or on a label.

THE DATA REQUIRED

listed below

TIMELINE

2024
Start of Pilot plan for Textiles

2025
Publishing unified standards by CEN/CENELEC and delegated acts.

2026
Activities to help the implementation of the rules and standards

Delegated Acts for Textile

2027
Implementation
February: DPP for Batteries.
July: DPP for Textile

THE SCOPE

All products sold in the EU whether manufactured locally or imported, must meet this requirement, except for food and medicinal products

THE CHALLENGE:

EASY ACCESS OF COMPLEX DATA

ACCESSIBILITY

The DPP should be easily accessible by a data carrier like a QR code, bar code, NFC tag or RFID physically present on the product

Data carriers will enable DPP to achieve its ultimate goal to share product data transparently.

THE DATA REQUIRED

- Origin
- Composition
- Substance of Concern Information
- Environmental impact
- Repair options
- End-of-Life Instructions: Disposal and recycling
- Compliance Documentation: Conformity declarations and certificates
- Voluntary EU Ecolabels
- Product Performance Data

Depending on the complexity of the value chain, the size and nature or impacts of the product, a DPP will be specific to the ITEM, BATCH or PRODUCT model.

That system of data transition must be defined and developed in advance.

Starting to address this challenge in 2027 will be too late.

THE SYSTEM

Company Database → Building a supply chain at a batch / product level → Data Validation (mandatory) → Data Verification (optional) → Publication

This system has been the foundation of Product DNA methodology since 2005.

Supply Chain Discovery → Supplier Due Diligence → Traceability and Transparency

DPP PILOT PROJECT

COLLABORATION

bluesign · **ProductDNA**

bluesign® technologies is a Swiss company that ensures safer and more sustainable textile production by managing the entire supply chain. They work with brands and factories to improve resource efficiency, reduce chemical use, and enhance worker safety. Their rigorous certification system sets the highest global standards for environmental and consumer protection in textile manufacturing.

bluesign's Goal

Automate the creation of a Digital Product Passport (DPP) to showcase product traceability and performance—starting with chemical impact, followed by waste, water, and CO2 metrics.

Challenge

How can they accurately trace a product's true supply chain to provide real-time performance data on the DPP?

Product DNA Solution

Leverage Respect SaaS to integrate bluesign's databases and build the supply chain at a batch level.
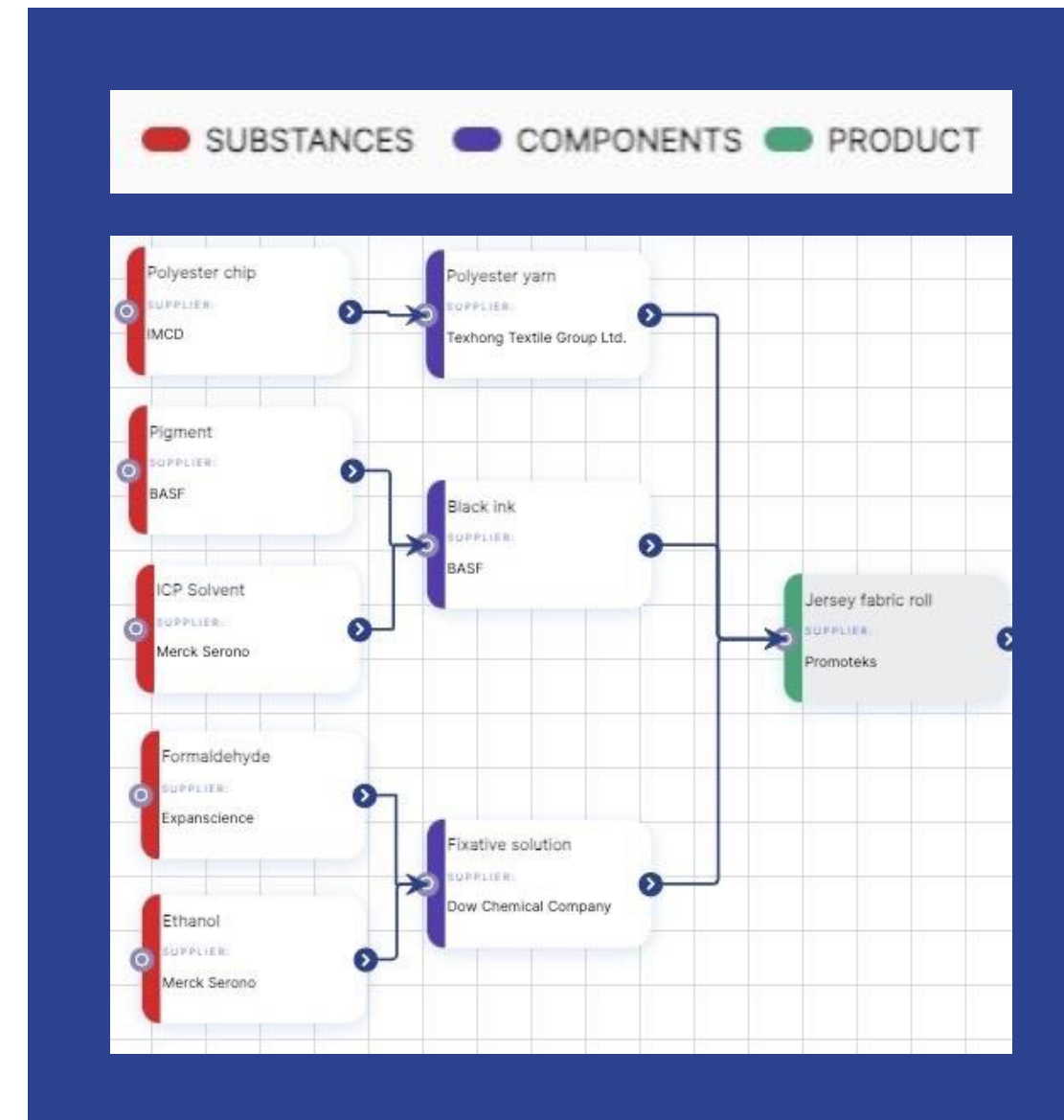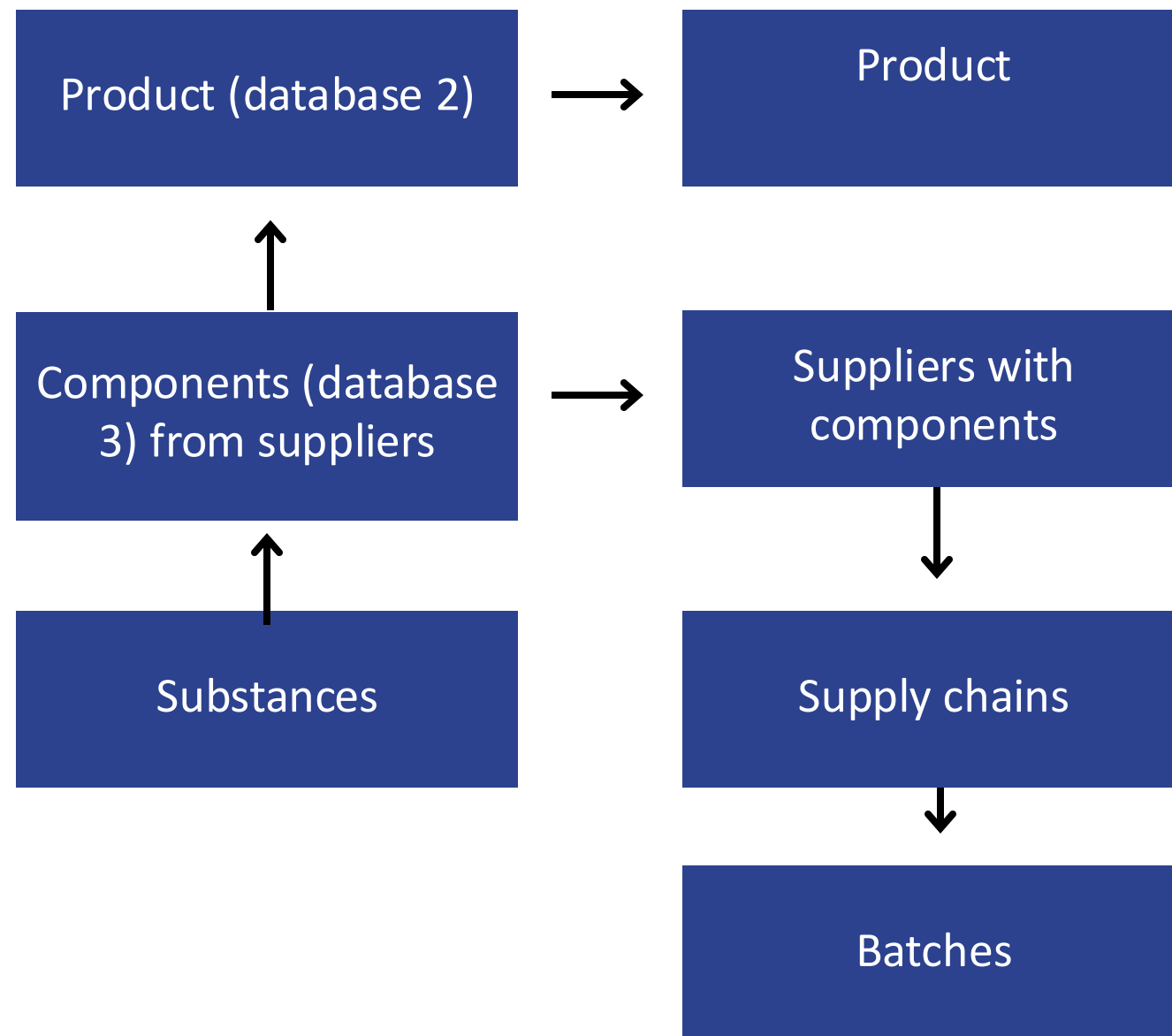
Added Value

Boost bluesign team engagement in factories through audits and tests linked directly to the DPP.

STEP 1 DATABASE INTERFACING (COMPLETED)

bluesign database   **Respect SaaS**

Product (database 2)	Product
Components (database 3) from suppliers	Suppliers with components
Substances	Supply chains
	Batches

STEP 2a: VALIDATION

Mandatory

Building the supply chain at the batch level gives you visibility into every step and detailed information for each supplier. This makes it easy to choose the data you need for publishing the DPP.

Publishing is not possible before prior validation by Product DNA as a third party.

In the near future, we'll be able to fully rely on AI to complete this step.

STEP 2b: VERIFICATION

Optional

Verification ensures the accuracy and consistency of pre-published or published data.
It involves professional audits conducted at defined intervals or randomly, typically at least once a year.

Product DNA appoints an independent third-party, verifying body (e.g. SGS, bluesign, and other)
to verify data legitimacy by reviewing selected batches, requiring suppliers to provide necessary documentation.

The audit process includes an initial personal or video call, followed by written communication for renewals.

When completed, a Traceability Audit Report with findings and recommendations will be issued.

STEP 3: PUBLICATION

Data publication with user-friendly interface on the Product DNA transparency platform: respect-code.
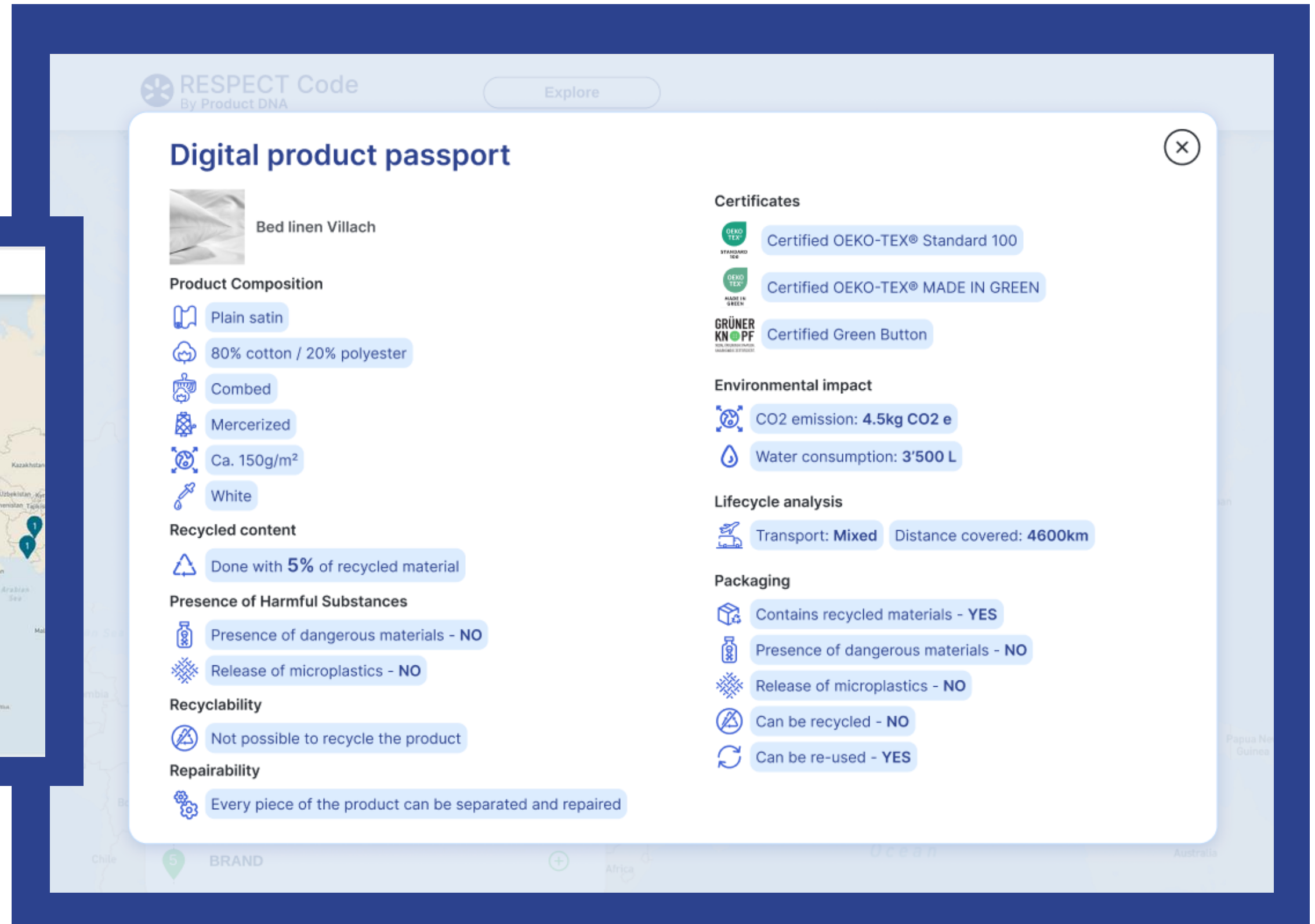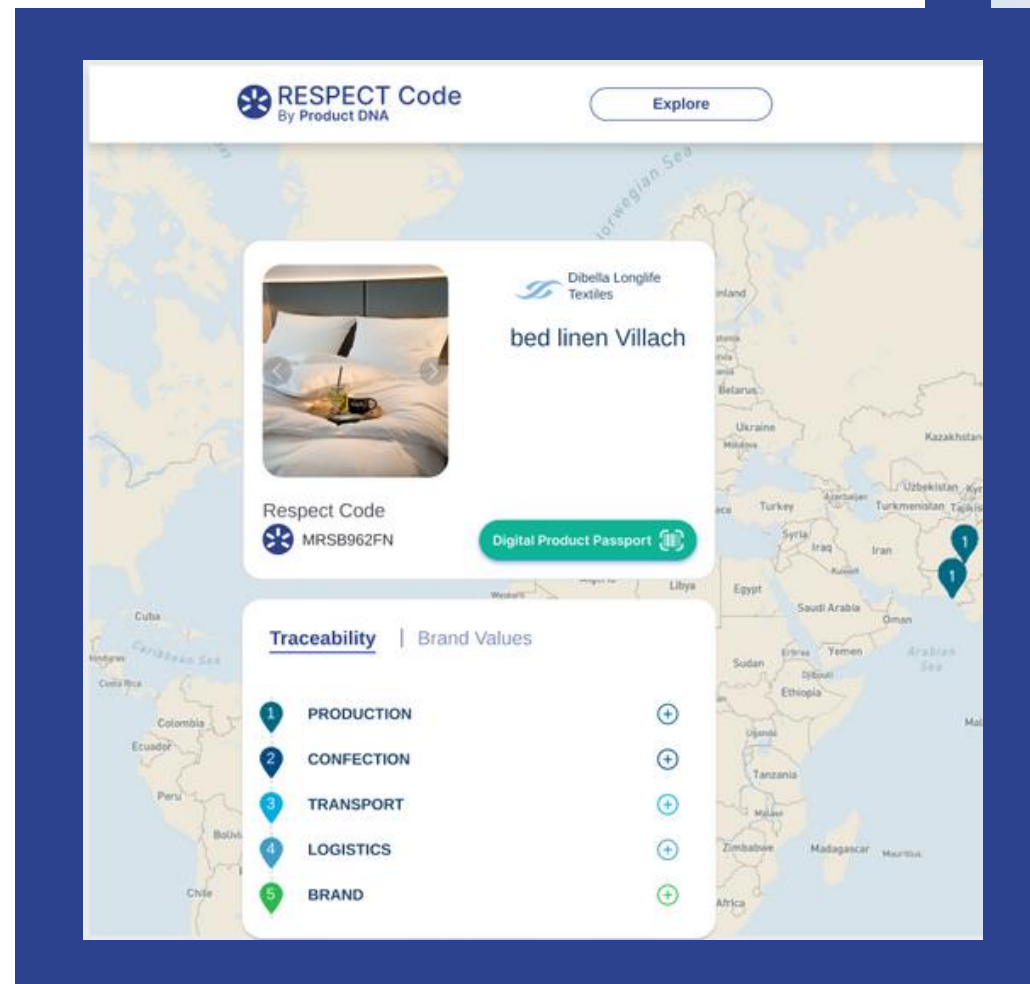
WHAT WORKS WITH CUSTOMERS (PUBLICATION)

The DPP requirements are clear, but we need to carefully choose how to present the publication to ensure we offer a relevant product.

WHAT WORKS	WHAT DOESN'T WORK
Traceability—from raw materials to production to end-of-life management.	Overwhelming Amounts of Data
Sustainability Credentials—carbon footprint reduction, ethical sourcing, and eco-friendly production practices	Inaccurate Information (no room for discrepancy)
Regulatory Compliance – EU Green Deal	Complex Navigation
User-Friendly Access | Simplicity	Lack of personal relevance (details about parts of the supply chain they don't care about)

MOST IN-DEMAND DATA (PUBLICATION)

The above defines the most and least in-demand data.

That's why, we're continually enhancing customer feedback to make the 'pre-purchase check' process an engaging and motivating experience.

MOST IN-DEMAND	LEAST IN-DEMAND
Sustainability Metrics	Technical Specifications
Supply Chain Traceability (factories and regions)	Internal Business Metrics
Lifecycle & End-of-Life Management: recyclability, biodegradability, and circular economy initiatives	

WHAT HAPPENS AFTER THE DPP COMES INTO EFFECT?

Each company will showcase its own DPP. Customers will choose the one that is clearest, easiest to understand, and most user-friendly. Over time, the most user-friendly DPP will prevail.

The DPP will establish a new communication standard, connecting companies with authorities and end customers alike.

Our Vision: A Globally Transparent Economy

Thank You

Learn more:

productdna.com
bluesign.com
SGS.com