

Digital Product Information Systems



One planet
handle with care

Digital Product Passport & Tracing, Policies for Successful Implementation

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Mainstreaming sustainability and circular economy in an age of rising resource use

- A **sustainable & circular economy** requires great **transparency** and **traceability** of products, to make better decisions, from the extraction of raw materials to the **end-of-life** of products.
- Over **90% of consumers** globally express an interest in **healthy and sustainable** products (GlobeScan 2023).
- **Digitalization** will become key to systematizing, integrating and democratizing **environmental data**, knowledge and insight for new collaboration opportunities and **impact**.

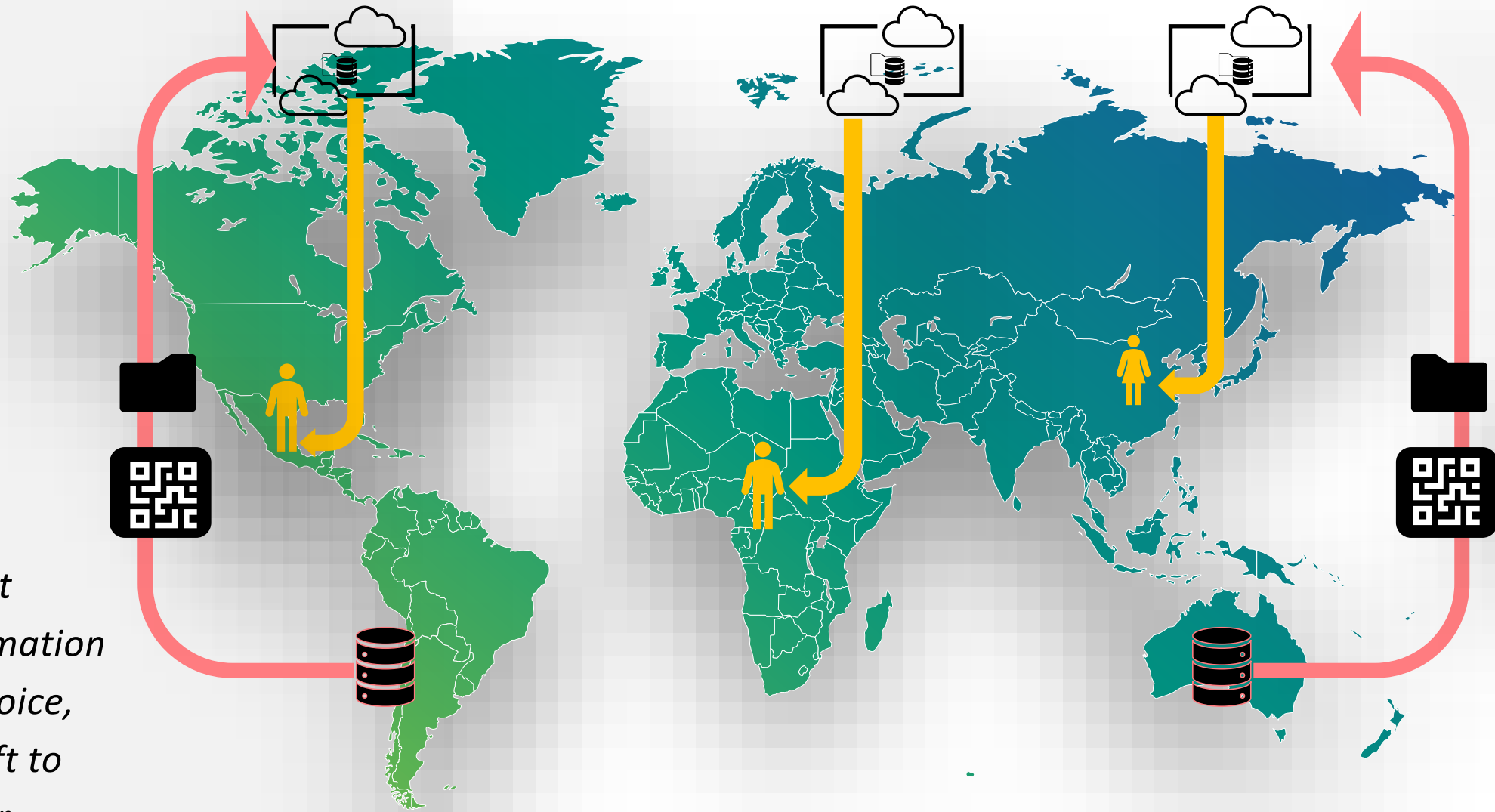
By 2060, resource use is projected to grow by 60%

Increasing resource use is the main driver of the triple planetary crisis and derails global climate, biodiversity, and pollution targets - as well as economic prosperity and human well-being.



Our vision

*A world where
transparent product
sustainability information
empowers every choice,
driving a global shift to
sustainable, circular
economy*



Digital exchange information flow: Connecting stakeholders globally through sharing digital product information

To achieve that vision, DPIS systems must be **interoperable** and put **sustainability and circularity** at its core

Ensure sustainability and circularity is at the heart of DPIS

- Provides support in developing DPIS for circularity and sustainability
- Pilots DPIS in high impact sectors



Promote sustainable global markets through DPIS

- Brings in voices from medium and low-income countries
- Enable market access to businesses (in particular SMEs)

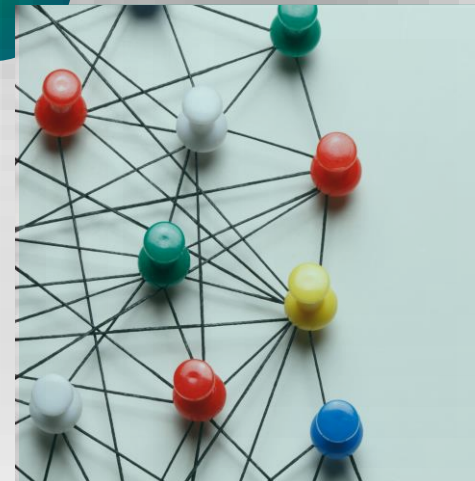


Link DPIS to global sustainability agenda

- DPIS supports consumer protection and sustainable consumption
- DPIS enables MEA implementation

Create a unified landscape of globally interoperable DPIS

- Support interoperability of various DPIS
- Contribute to global standards on DPIS



How we
achieve
that

1.

Convene: **Digitalization 4 Circular Economy**

2.

Co-Create: **Global framework for action on DPIS**

3.

Implement: **Sector pilots & implementation guidelines**

4.

Support: **Skills development**



1. Impact Initiative Digitalization 4 Circular Economy



MISSION

Accelerate the implementation of **digital product information systems**, enabling sustainability and circular economy transitions in a resource-constrained world.

Goals of the initiative

- Learn:** Increase understanding of DPIS globally and learn from peers
- Contribute:** Create and bring in knowledge on relevant topics and collaborate on joint outputs
- Showcase:** Show ongoing efforts on DPIS, including sector-specific applications and research

How to join

D4CE 2026 is open to join
Contact: Laetitia.Montero@un.org

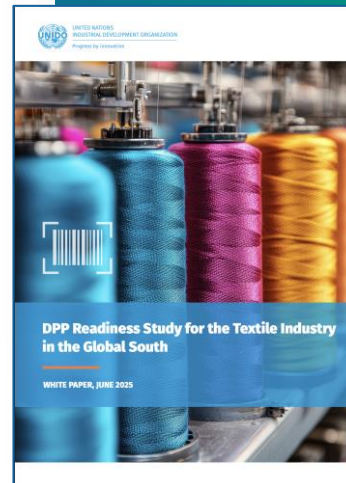
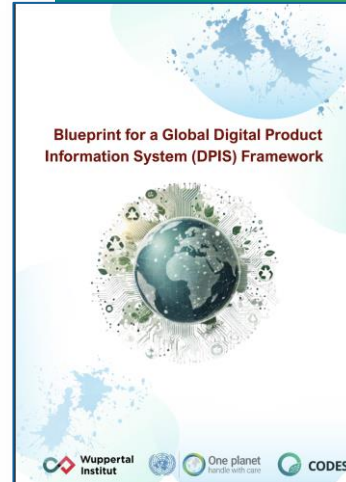
Over the last years, Digitalization 4 Circular Economy contributed to key publications to accelerate adoption of DPIS

Blueprint for a Global DPIS Framework

Prepared by the Digitalization 4 Circular economy initiative, this report provides a foundation for a global framework for Global Digital Product Information Systems (DPIS) that will guide the design of interoperable digital solutions that embrace circular principles and are inclusive by design.

DPP Assessment Textile in Global South

UNIDO, with UNEP support, conducted a readiness assessment in key textile exporting countries of the Global South. Findings identify critical gaps that need to be addressed to scale Digital product passports (DPPs) in textile industry in global south.



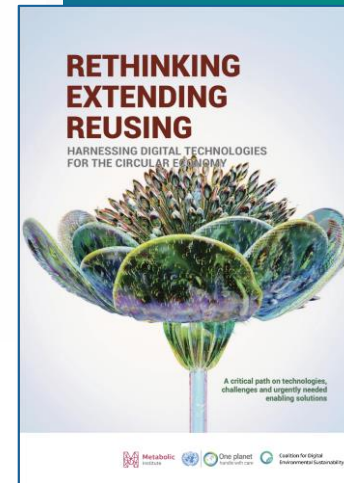
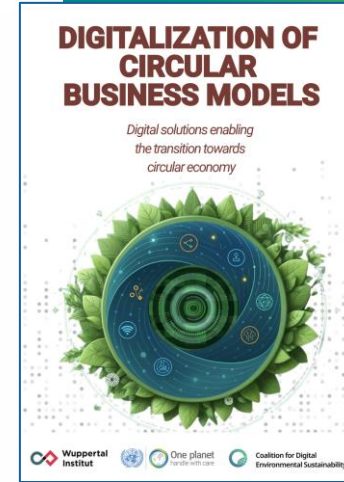
Intervention lab: Global digital standards

Digitalization of Circular Business Models

Supported by the Wuppertal Institute, this report explores how digital technologies—IoT, AI, and Digital Product Passports—drive circular business models. These solutions advance the circular economy while reducing costs, creating value, and reshaping value chains.

Harnessing digital technologies for circular economy

This report shows what digital pathways and technologies are available to unleash the potential of the circular economy. It identifies opportunities, as well as challenges and barriers.



Intervention lab: Business models

2. Building on the blueprint in 2026 UNEP will co-develop a framework for global action on DPIS

2025

Blueprint for a Global DPIS
Framework



2026

Global Framework for DPIS



Common framework to harmonize and scale DPIS placing circularity and sustainability at its heart

Key principles;

- Embed sustainability and circularity; defining data categories
- Defining fundamentals incl. technical architecture, governance, financial mechanisms
- Ensuring equity and inclusion; develop in an inclusive process with feedback from transition economy countries

To be used by: Policy-makers, DPIS implementors

2. The global framework for DPIS defines core elements on functional, technical and governance-related aspects needed for interoperability

2026

Global Framework for DPIS



a. Main Functionalities

Describes the main features. Identify and select the functionalities that a specific system can have.

b. Main Technical System Components

Characterizes main components of the digital product information system

c. Governance and Policy

Governance aspects, e.g. access rights, implementation, operational rules, establishment of safeguards.

d. Data Categories

Categories and subcategories of data as a baseline that could be included into a system

e. Relevant Global Standards

Identifies and lists existing and emerging standards

f. Financial Mechanisms and Incentives

Mechanisms that support education, training and assistance for SMEs, governments and consumers

g. Capacity Building and Skill Development

Lines out what stakeholders need to learn and how they can profit from the system. Describes how systems can simplify processes and purposes for authorities and how civil society can be enabled.

2. The seven proposed data categories will provide the foundation for incorporation of sustainability and circularity in DPIS

2026

Global Framework for DPIS



Organize regional and expert consultations

Objective of consultations

Regional and expert consultations enable us to co-develop the framework, enhance awareness, and integrate regional priorities and stakeholder feedback

What happened so far

- 10 consultations
- Involved 300 experts
- Total 86 countries represented

What is coming up

- Africa consultation - 10-13 February 2026 in Malabo, Guinea Equatorial
- Expert consultation critical minerals with UNEA national focal points



July 2025

Latin America consultation

16 countries represented

Included ministries, standard setting bodies and consumer protection agencies.


3. Sector pilots & Implementation guidelines

Pilot DPIS in **high-impact sectors** to generate practical evidence for the Global Framework, inform **national policy design** develop sector-specific DPIS modules that address **sector-level** data and governance needs.


3 ongoing pilots, guidance:

Textiles sector

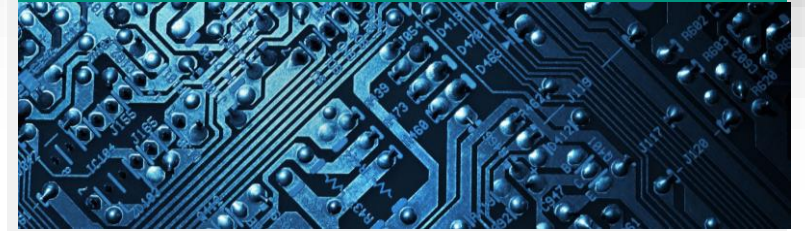



 **Pilot program in Argentina:** Testing DPIS framework and develop full DPIS solution.

Key partners: BCRC Sth America

 **Pilot Program in India, Indonesia, Africa:** InTex project

Electronics sector



 **DPIS guidelines for electronics:** develop guidelines for a modular and scalable data system design of Digital Product Information Systems (DPIS) for ICT products
Key partners: ITU, Huawei Technologies, UPC, Egypt



5. Skills development

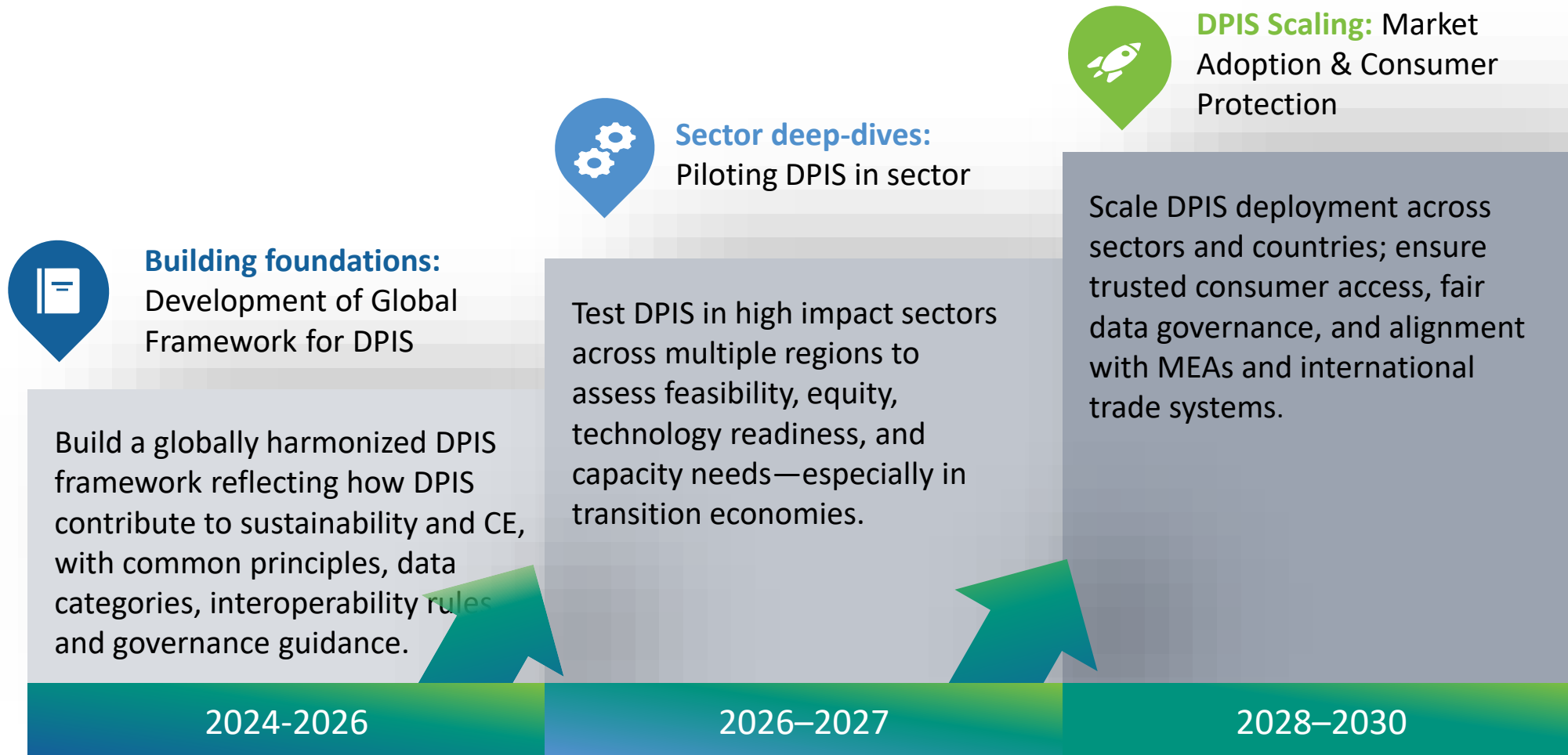
Objective: Deliver training programs to develop competencies in DPIS system utilization, communicate their value proposition, and provide implementation guidance

Target audience: businesses in particular SMEs



UN One Planet Network Sustainable Business Innovation Lab

After completing the foundational framework, the focus shifts to implementation, scaling DPIS and empowering consumers



Thank you

