CENTRE OF EXCELLENCE
DATA SHARING & CLOUD

An overview of DPPs

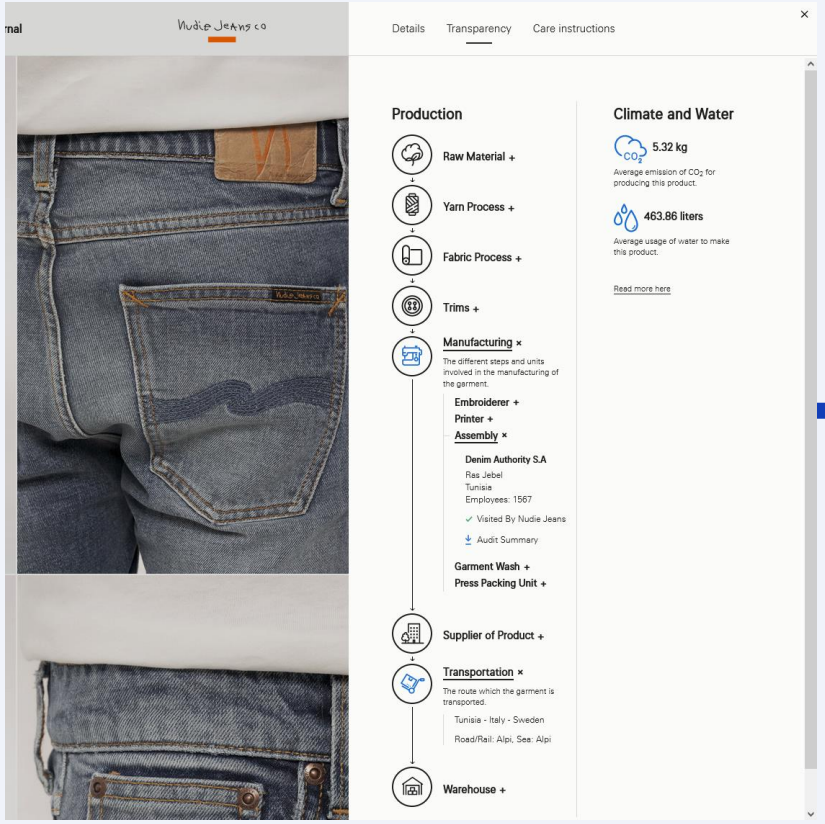
May 22nd

Sjoerd Rongen

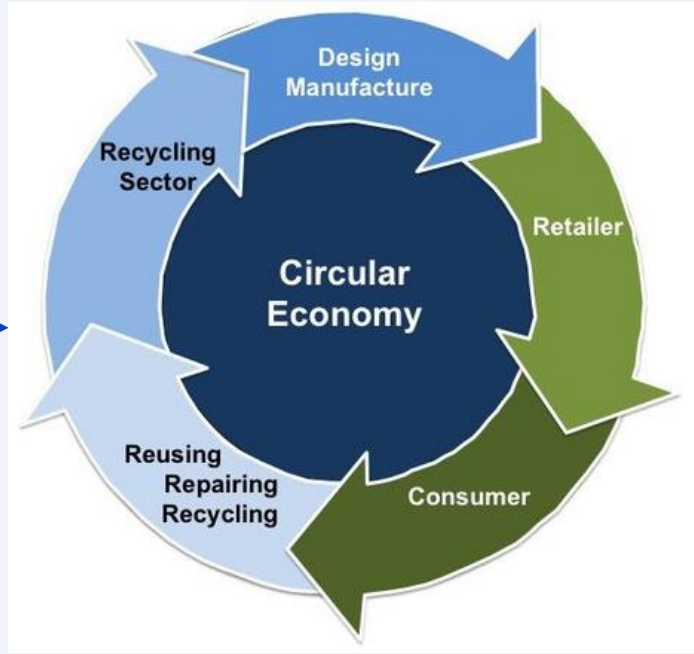
TNO innovation for life

1 slide overview

The Digital Product Passport (DPP) is an information system that makes accessible on a need-to-know basis data relevant to product sustainability along their value chains [(EC ecodesign regulation proposal)]

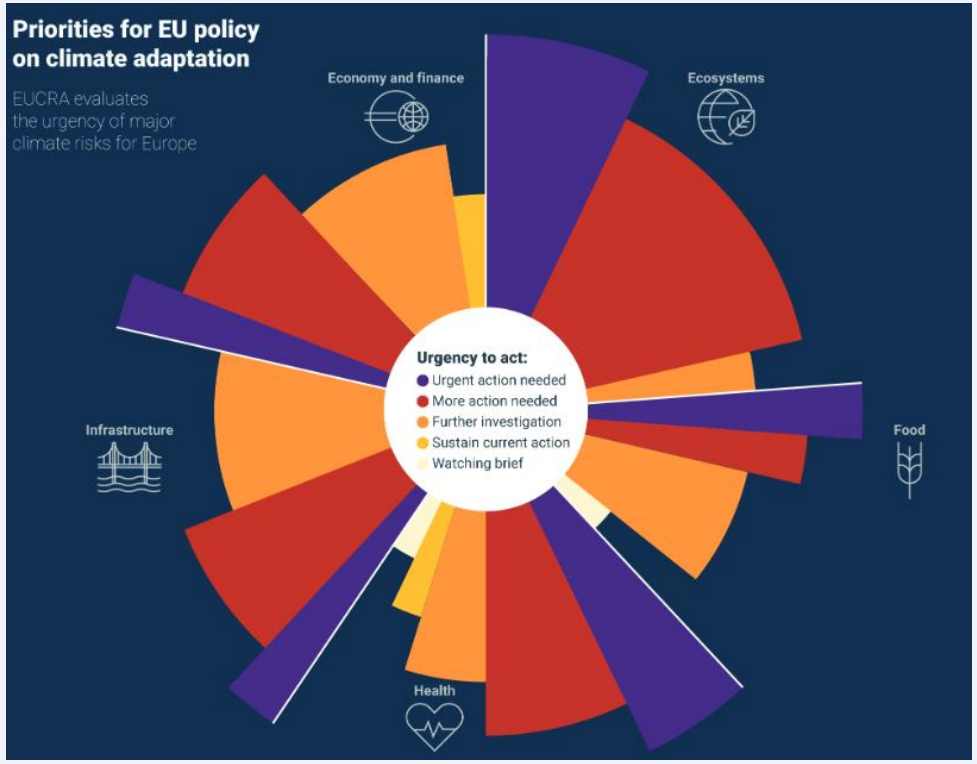


[Where we are at, individual companies presenting audit reports in a nice UI]

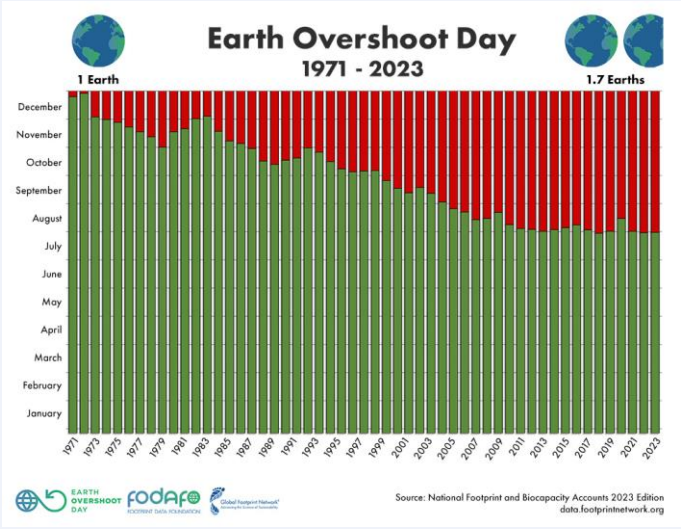


Where we have to go, transparent value chains to support a circular economy in which materials are reused

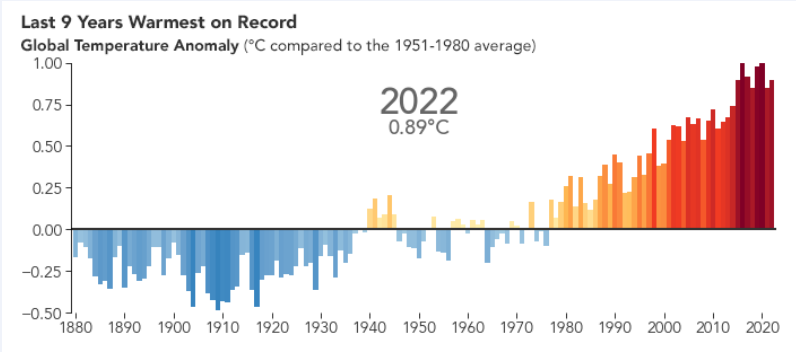
“Europe is not prepared for rapidly growing climate risks”*



*According to: European Environment Agency



We’re using to much resources



The planet is heating up

We rely on outside entities

Bauxite	**Coking Coal**	**Lithium**	**Phosphorus**
Antimony	**Feldspar**	Light rare earth elements	Scandium
Arsenic	Fluorspar	Magnesium	Silicon metal
Baryte	Gallium	**Manganese**	Strontium
Beryllium	Germanium	Natural Graphite	Tantalum
Bismuth	Hafnium	Niobium	Titanium metal
Boron/Borate	**Helium**	Platinum group metals	Tungsten
Cobalt	Heavy rare earth elements	Phosphate Rock	Vanadium
		Copper	**Nickel**

“The risks associated with the concentration of production are in many cases compounded by low substitution and low recycling rates.”

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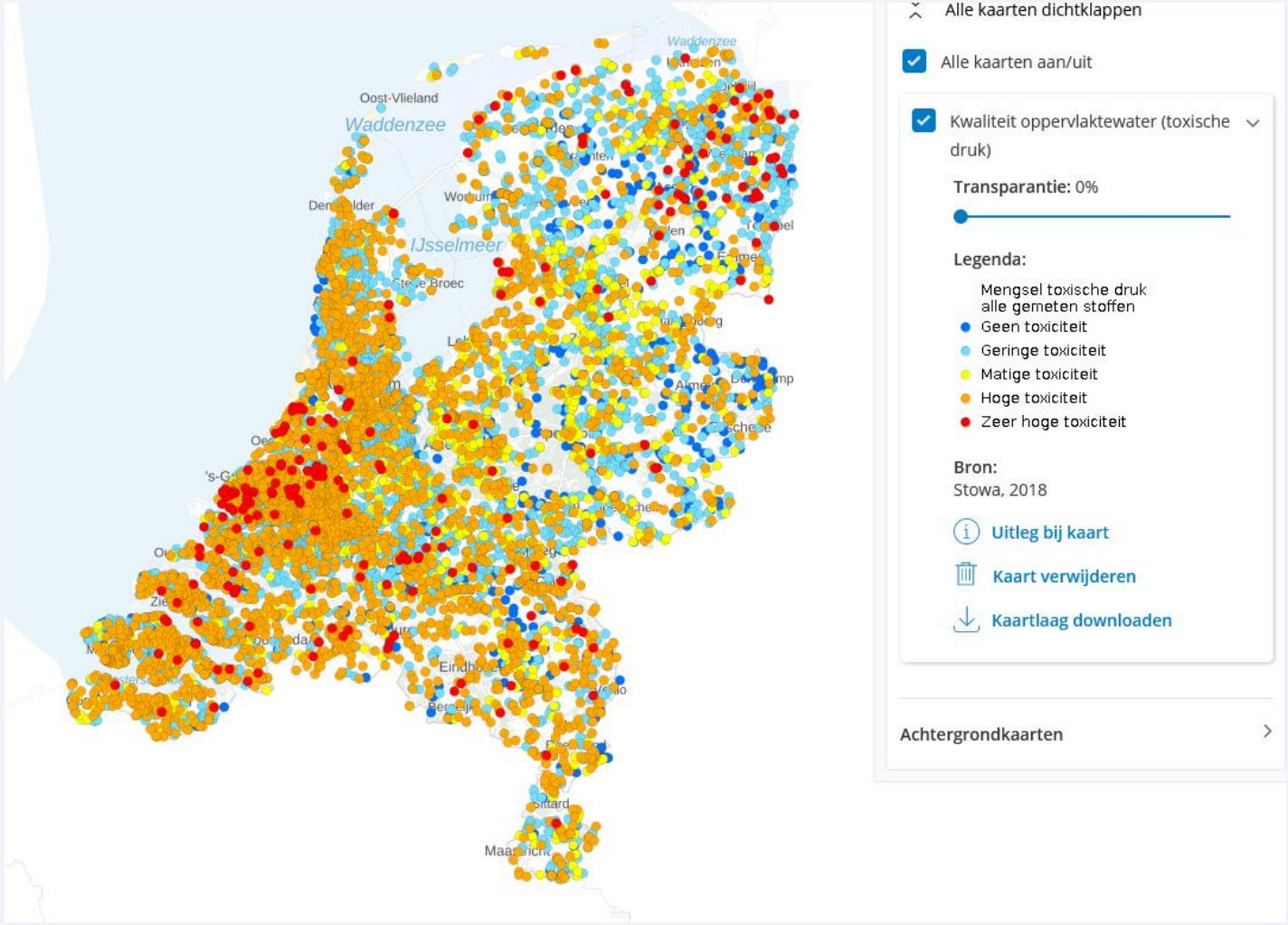
Who's making a mess?



[Water quality in the Netherlands is insufficient]

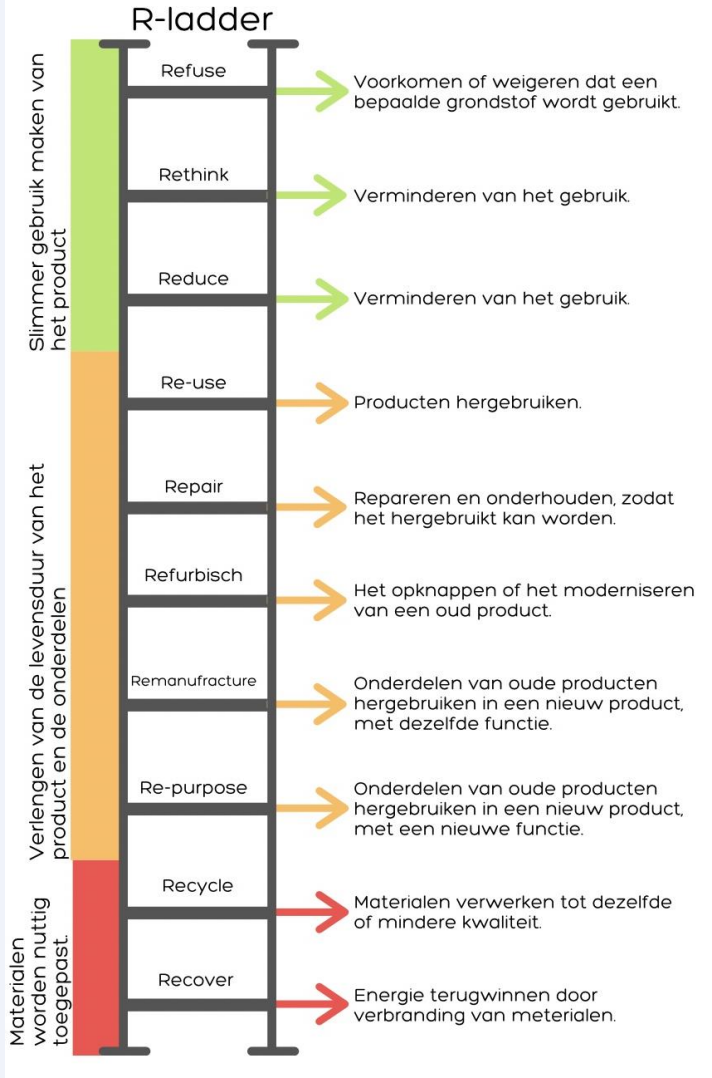
One passport, many birds

- We track where products come from
- How they are made
- Where they went

- Enabling reusing of material within our economy
  - Improving our sovereignty

- Informing (pollution) root cause analysis
  - Enabling more targeted policy and enforcement

- Reducing our carbon footprint



CNECT DIGIT ENER ENV GROW TAXUD

DPP - TEAM

- a. Projects
- b. Standardisation
- c. Non-EC ongoing activities
- d.Implementation in ESPR Das
- e. DPP in other EU policies
- f. Deployment (2024-2027)

a. Projects

- CIRPASS
- Registry
- CIRPASS 2
- Other RTD projects
- Blockchain sandbox regulatory
- Sandbox PCP implementation

b. Standardisation

1. MoU with DIGIT
2. Standardisation process CEN/CENELEC
3. Interactions with stakeholders in relation to DPP design
4. HLF on standardisation

c. non-EC ongoing activities

1. US
2. UNECE
3. WBCSD
4. GBA
5. WTO
6. GS1
7. Other private initiatives
8. Other governmental initiatives

d. Implementation in ESPR DAs

1. Textile
2. Iron & Steel

e. DPP in other EU policies

1. Batteries
2. Construction Products
3. Toys
4. Detergents
5. CRMA
6. PPWR
7. Market surveillance & NLF
8. Customs
9. eFTI
10. EPREL
11. SCIP

f. Deployment (2024-2027)

1. DAs on service providers
2. IAs digital credentials
3. DAs on identifiers and data carriers lifecycle management
4. Design and set-up of the DPP registry
5. Design and set-up of the DPP Web portal
6. IA on registry
7. Amendments to the EU SWE-C IA/DA
8. MoU with TAXUD
9. Design and set-up of interconnection of DPP registry with national customs via EU CSW-CERTEX

CNECT | DIGIT | ENER | ENV | GROW | TAXUD

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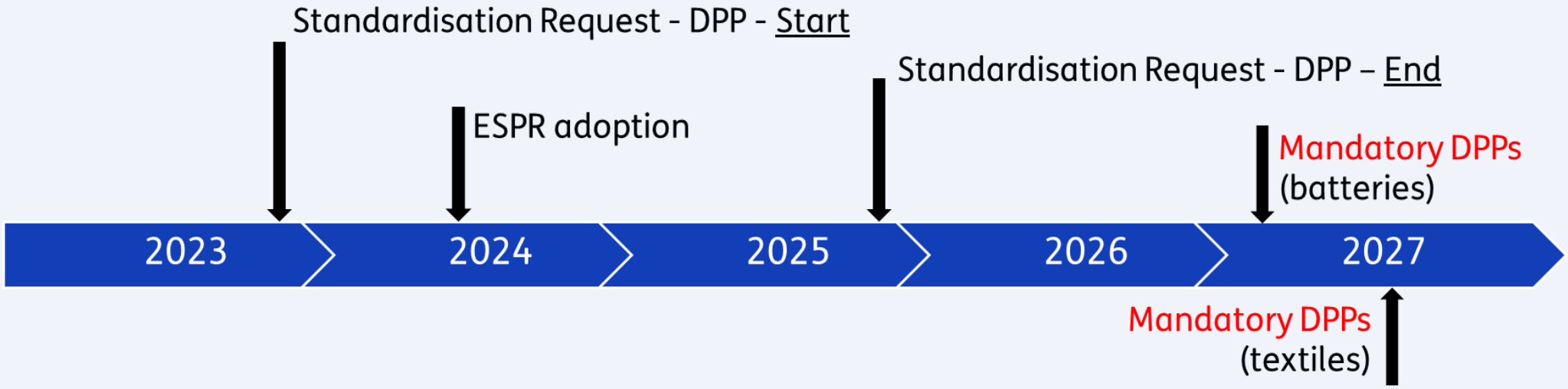
The parts we know

- The (European) time lines and policy
  - Policy is sparse on implementation details
- EU vision on data sharing
  - Decentralized, FAIR
- EU memberstates will have to implement



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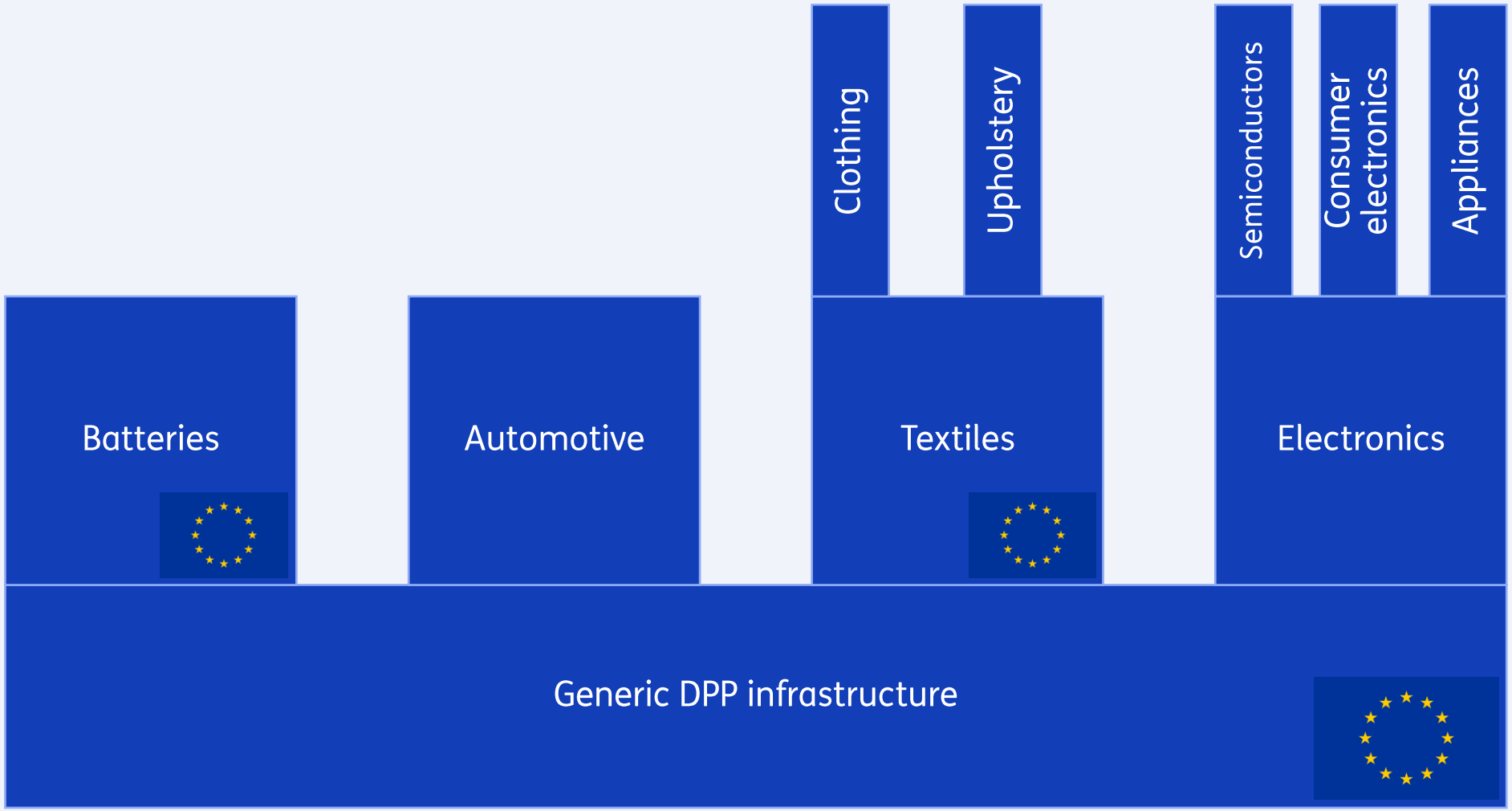

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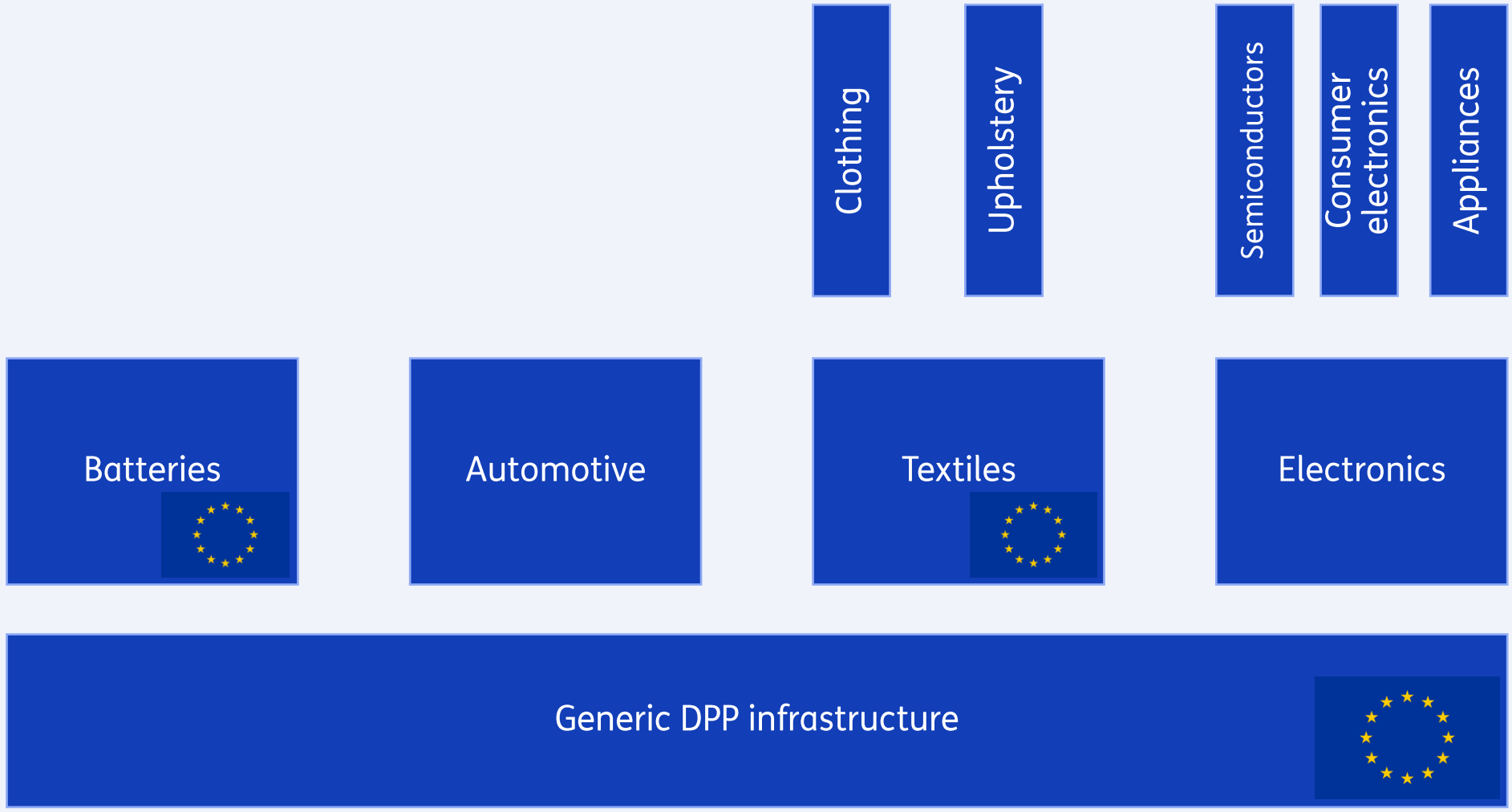


What we have

- Ecosystems
- (inter)national projects
- Pre-existing technologies

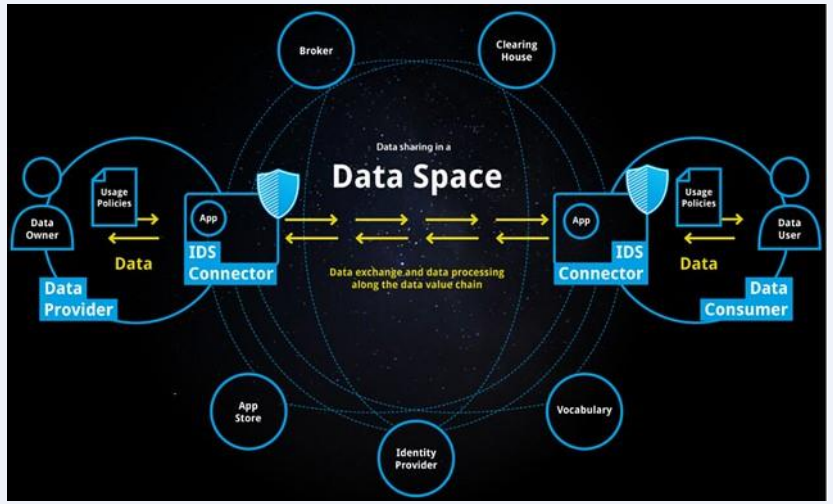
CIRPASS 2 Digital Product Passport

DATAPIPE

Dutch Blockchain Coalition
connect and create

DaCapo

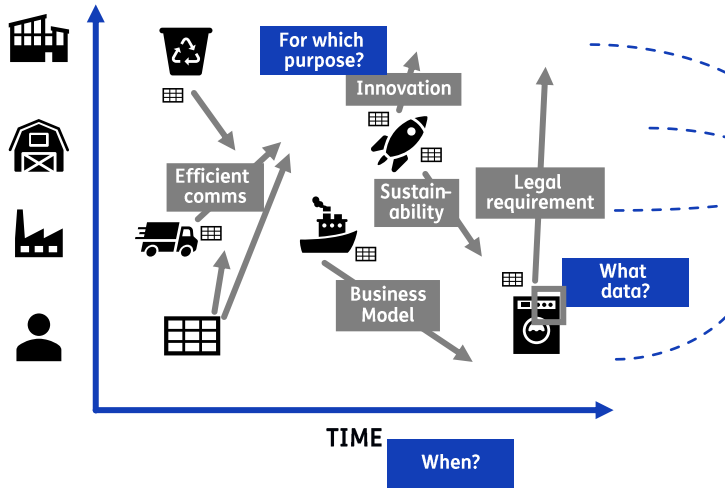
NXT GEN hightech



A Product Passport consists of data and a system. The challenge is to make the *right* data available and make agreements about the system

CHALLENGE

THE RIGHT DATA AVAILABLE



MAKE ECOSYSTEM AGREEMENTS

Regulatory Framework | Contracts | Governance
Applications / UI | Processes
Semantic Model | LCA | Trust Mechanisms
Identity | Data Sharing Solution | Access and Usage policies
Data Storage | Data Carrier

Challenge

What data that should be available to whom, when, for what purpose?

Challenge

How to develop a set of agreements that lead to effective solutions within an ecosystem?

A Product Passport consists of data and a system. The challenge is to make the *right* data available and make agreements about the system

CHALLENGE

THE RIGHT DATA AVAILABLE

- This should happen at organizational level
- This is a hard problem because core business processes needs to be redesigned for circular economy business models
- Consultanties help organizations do this work

MAKE ECOSYSTEM AGREEMENTS

- This should happen at a sectoral and cross-sectoral level
- Sectoral Agreements are hard to realise
- Cross-Sectoral Agreements the market has no viable solutions for

Challenge

What data that should be available to whom, when, for what purpose?

Challenge

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Thank you

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TOPSECTOR ICT dutch digital

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