CIRCULARISE

Bringing transparency and traceability to global supply chains with Digital Product passports
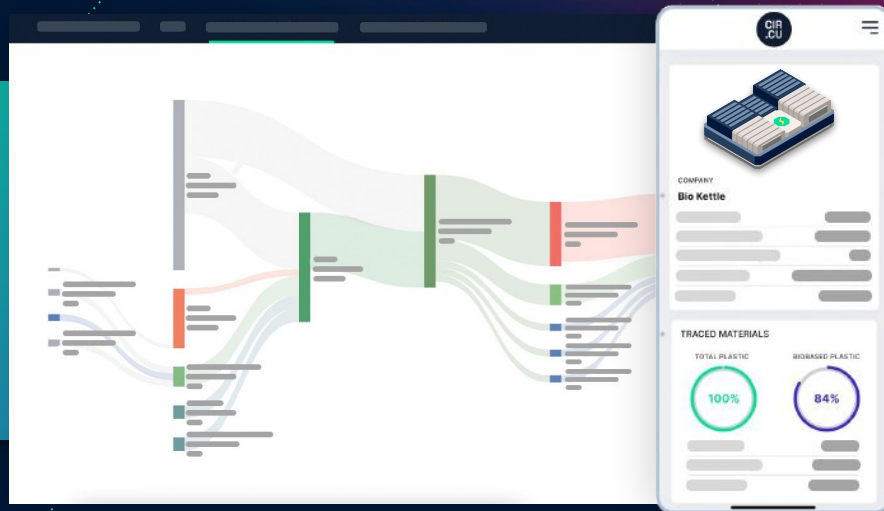
Regulations - Which ones are on your radar?

Sustainable product policy & ecodesign

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC

CHAPTER III - DIGITAL PRODUCT PASSPORT

Article 8
Product passport

SUSTAINABILITY

H&M, Decathlon Dial Back Claims to Dodge Greenwashing Crackdown

H&M and Decathlon will also donate €500,000 (about $508,000) and £400,000 respectively to causes linked to sustainability in the fashion industry.

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020

Article 65
Battery passport

1. By 1 January 2026, each industrial battery and electric vehicle battery placed on the market or put into service and whose capacity is higher than 2 kWh shall have an electronic record ("battery passport").

Circular economy action plan

The European Commission adopted the new circular economy action plan (CEAP) ●●● in March 2020. It is one of the main building blocks of

● Council of the EU   Press release   28 November 2022   10:30

Council gives final green light to corporate sustainability reporting directive

The Council gave its final approval to the corporate sustainability reporting directive (CSRD).

This means that companies will soon be required to publish detailed information on sustainability matters. This will increase a **company's accountability**, prevent divergent sustainability standards, and ease the transition to a **sustainable economy**.
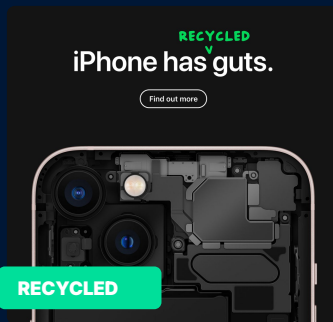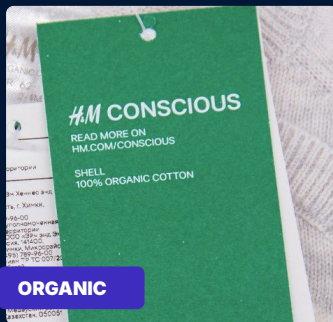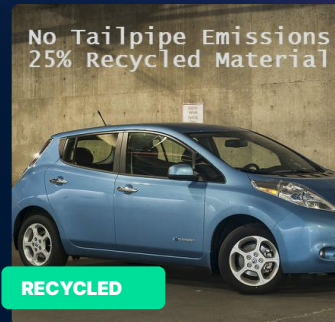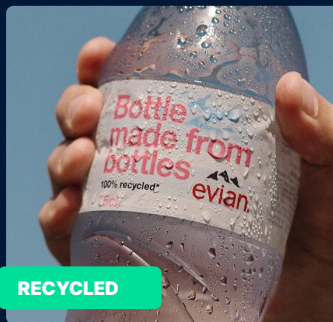
Overview of upcoming regulations available here

Supply chain complexity and environmental impact

Lack of trust in data sharing amongst Suppliers:

- Current systems do not ensure trustful and confidential data sharing
- No incentives to share data

Lack of visibility beyond Tier 1-2:

- Limited understanding of materials and flows
- Scope 3 remains unknown
- Lack of sufficient data quality

Industry Challenges

Data Sharing

Companies have no way of communicating openly with suppliers & customers

Wasted Resources

Landfills are growing → Valuable materials going to waste

Green-washing

High risk and high costs

Legislation

More pressure from governments

Traceability today

From supplier@example.com   Bcc

To customer@example.com

Product Certificate

📄 Certificate.pdf
66 KB

Dear Customer,

Please find attached the document you requested.

Kind regards,

Supplier

Send | ∨   Discard
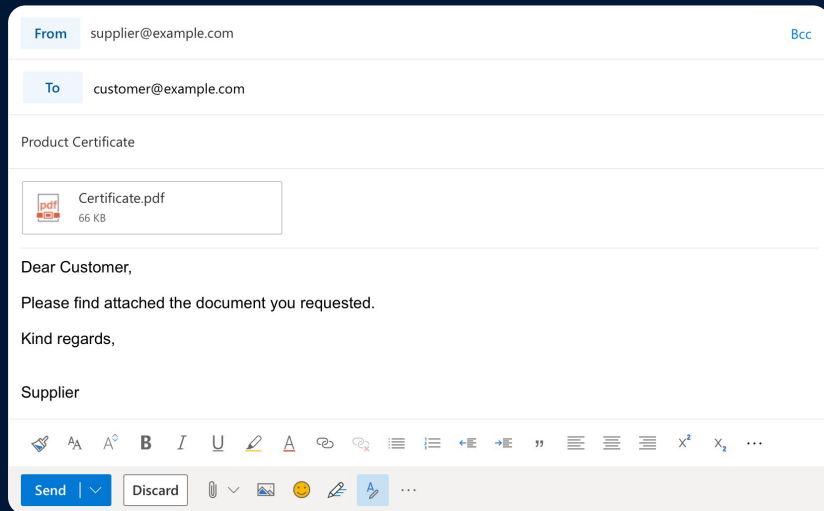
- Labour intensive
- Prone to error and/or fraud
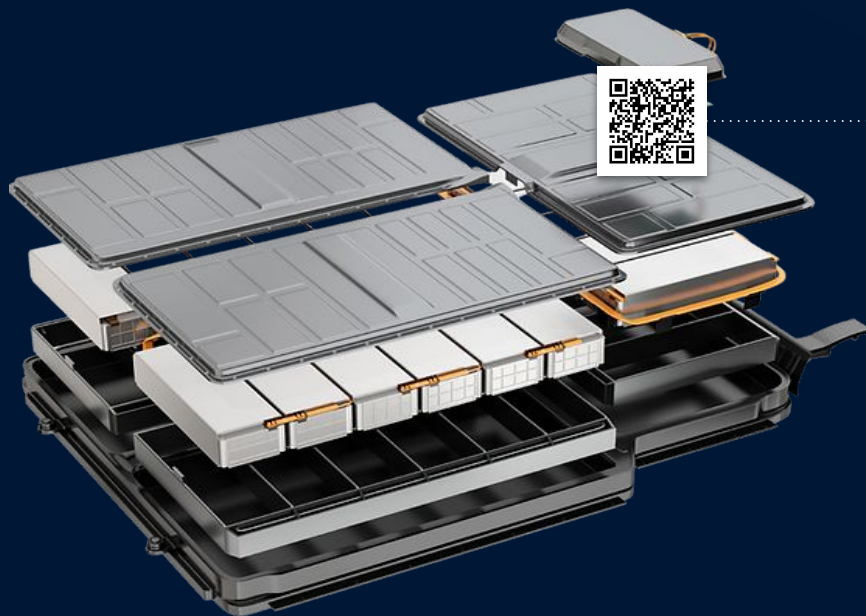- Usually reactive
- Not scalable

Look familiar?

Supply chain visibility is one of the greatest barriers to achieving circularity

Circularise was founded on a vision for Circularity

MATERIAL MANUFACTURERS & COMPOUNDERS

MOULDERS & PART MANUFACTURERS

OEMS & BRAND OWNERS

USERS & CONSUMERS

COLLECTORS & (PRE-)SORTERS

RECYCLERS & REFINERS

CIRCULARISE

MATERIAL
+ Origin
+ Certificates
+ Audit Reports

PART
+ Process Conditions
+ Bill of Materials

PRODUCT
+ (Repair) Manuals
+ Provenance

EOL PRODUCT
+ Usage logs
+ Maintenance history

WASTE
+ Specifications
+ Recovery logs

RECYCLED
+ Certificates
+ Quality assurances

Battery Passport Example

The Circularise battery passport

○ EV BATTERY

Circularise Battery Passport

Battery ID: 0xe2...DB05

🗄 500 kg
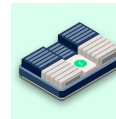
PUBLIC DATA PER **EU BATTERY DIRECTIVE**

Battery model	Model 1
Battery type	EV battery xyz
Product name	Power One
Manufacturing site	Kyoto Factory, Japan
Recycled content	Co 12%, Pb 85%, Li 4%, Ni 4%
Battery health	100%
Durability	200,000 km or 10 years guarantee
Performance	100 kWh
GHG emissions	5000 kg CO2 Eq
Supply chain due diligence policy	View here ⬇
Responsible sourcing	View certification ⬇
Hazardous substances	Hg <0.0005%, Cd <0.002%

ACCESS VIA **SMART QUESTIONING**

Declaration of conformity evidence	Download here ⬇
Certifications	Download here ⬇
Dispatch date	01/04/2023

○ CIRCULARISE | CONFIDENTIAL

Configurable to meet all your business and compliance needs

Create Product template

Enter template name

Frameworks ⊕ Add

🔍 Search framework...

- ⬜ Inflation Reduction Act (IRA)
- ⬜ European Battery Regulation (EUBR)
- ⬜ Uyghur Forced Labor Prevention Act (UFPLA)
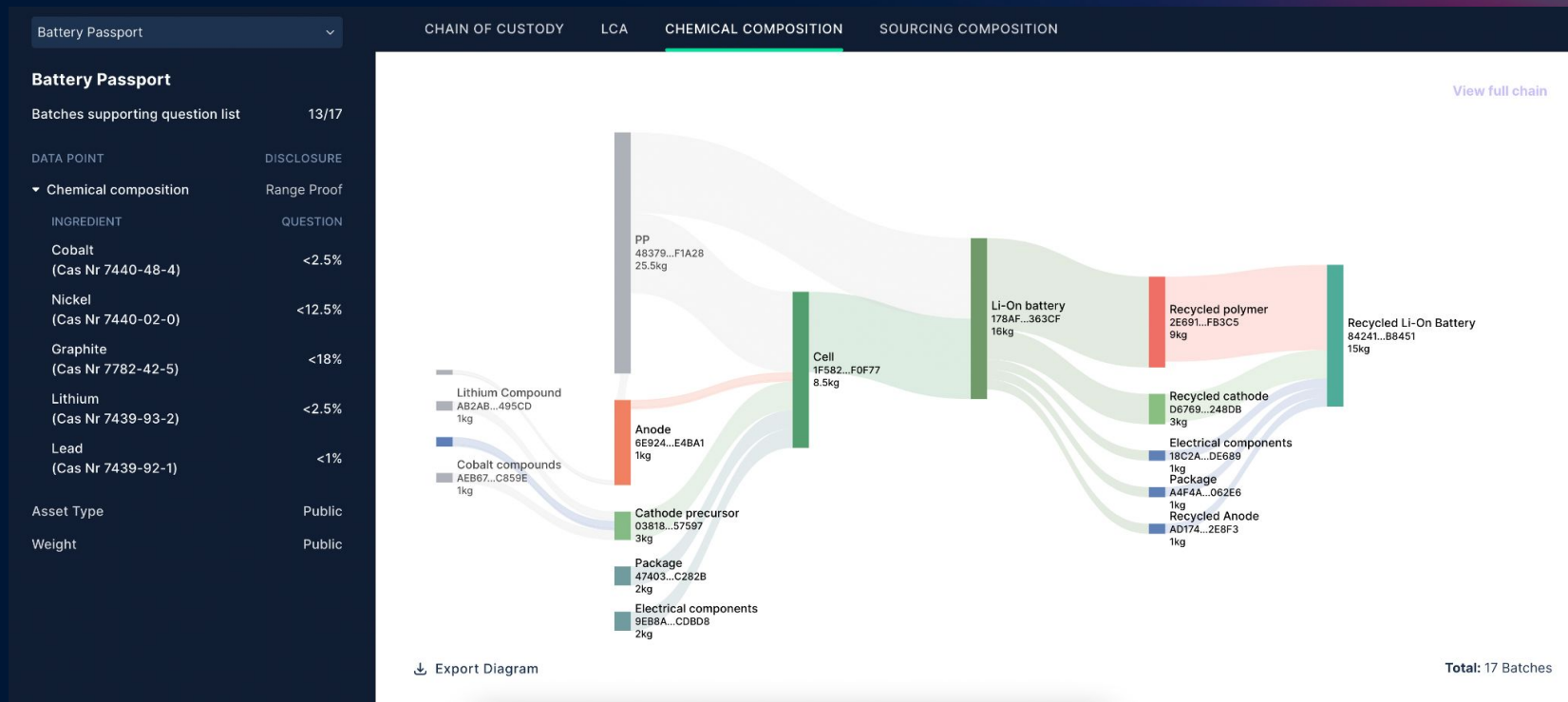- ⬜ European Deforestation Regulation (EUDR)
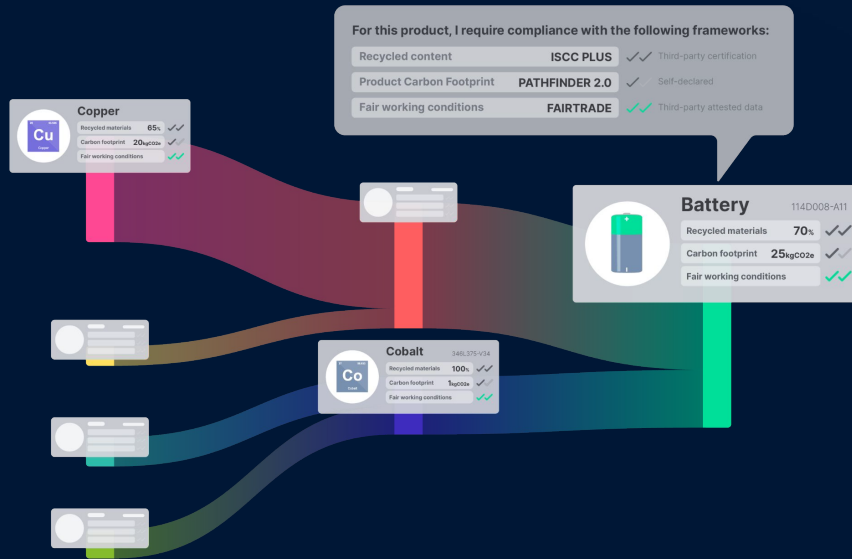- ⬜ Catena-X Battery Passport

Data points

Please select question ... ow data points.

Dashboards

Chemical composition - battery passport

Why **Product Traceability** is Essential for Modern Supply Chains

- Increasing **regulatory** demands for sustainability and ethical sourcing.
  - Upcoming regulations require not just corporate-level sustainability reporting but granular, product-level data.

- **Consumers** and stakeholders demand greater transparency.
  - Risk of **reputational damage**, compliance issues, and fraud without robust traceability.

- **Complex** global supply chains make it **difficult** to track materials from origin to end product.

We are the Leading Innovator for Digital Traceability

FUNDED BY

eit RawMaterials — Connecting matters · European Commission · NESTE · Brightlands Venture Partners · AsahiKASEI · 4IMPACT

CUSTOMERS

ITOCHU · Marubeni · MITSUBISHI CHEMICAL · Stanley Black & Decker · PORSCHE · EVBOX

DOMO · UL · covestro · Shell · Sika · Arçelik

STRATEGIC PARTNERS

Catena-X · ELLEN MACARTHUR FOUNDATION Member · WORLD ECONOMIC FORUM · GLOBAL BATTERY ALLIANCE · MOBI

And many more under NDA

○ PRODUCT

Magnum Eco Spinner
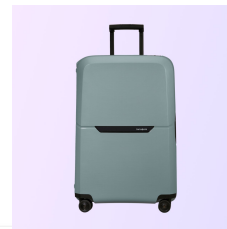
Samsonite

Product ID: CA23A...90CC3

🗄 2.6 kg

◉ Batch traceability   *Data is mocked for this demo

ACCESS VIA **SMART QUESTIONING**

🏢 Manufacturing site
📄 Certifications
📄 Circular characteristics
♺ Sourcing composition
◎ LCA

Chain of custody

🚚 ● 10/09/2022, 14:22
Product created from ● D35AA...B661A   [+2.6 kg]

[QR code] Scan for a **Digital Product Passport**

Digital Product Passports by ○ CIRCULARISE

SAMSONITE SUPPLY CHAIN

lyondellbasell — Advancing Possible · Samsonite · uponor

Public projects

Past:
CSERVEES (2018-2022) - Recycling WEEE
EIC Accelerator (2020-2022) - Company upscaling

Ongoing:
CSyARES (2022-24) - Rare earths, metals, mining sector, battery and magnet production.
Circular Foam (2021-25) - Polymers**,** plastics, polyurethane for white goods and building sector.
EuReComp (2022-26) - Aerospace, automotive and wind turbine industry and electronics.
Onto-Deside (2022-25) - Rare earths and metals sectors. Ontologies and data spaces.
PREcycling (2022-26) - Polymers in the electronics industry, children's toys.
REEsilience (2022-26) - Rare earths and metals for magnet production.
CE-RISE (2023-2026) - Critical raw materials, Electronics.
COMPASS (2024-2027) - Aerospace, automotive, composite and metals.

And more...

Constantly looking for new opportunities

CIRCULARISE