Bringing traceability to global supply chains and empowering businesses to take steps towards a circular economy.

Use a **decentralised public blockchain** as the single source of truth.
Our expertise since 2016
The value of traceability for our users

**Drive growth**
A competitive advantage

**Mitigate risk**
Identify & eliminate problems

**Reduce costs**
Automate resource management

**No risk to confidentiality**
Share insights, not sensitive data

**No Centralisation**
Use a decentralised public blockchain as the single source of truth

**For complex supply chains**
Scalable and accessible infrastructure that can support diverse solutions
Traceability today

**THE PROBLEM**

No efficient solution

- Labour intensive
- Prone to error and/or fraud
- Usually reactive
- Not scalable
The Circularise Digital Twin

1. **DIGITAL FLOW**
   - Monomer Manufacturer
   - Resin Manufacturer
   - Processing Manufacturer
   - OEM/Brands
   - Retailer
   - Consumer
   - Recycler

2. **PHYSICAL FLOW**
   - Monomer
   - Resin
   - Manufacturing
   - Processing
   - Retail
   - Consumer
   - Recycling

3. **Upload information to the blockchain**
4. **Retrieve information with confidentiality**

**Materials & Products**

**Token & Data**
Privacy matters
Your data stays with you

Smart Questioning
Patent-Pending

Get Answer
Verify Answer

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Questions?</th>
<th>Answer</th>
<th>Proof valid?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromide</td>
<td>Contains &lt; 15%?</td>
<td>Yes</td>
<td>✔️</td>
</tr>
<tr>
<td>Copper</td>
<td>Contains &lt; 20%?</td>
<td>No</td>
<td>✔️</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Contains &lt; 1%?</td>
<td>No</td>
<td>✔️</td>
</tr>
<tr>
<td>Fluorescent coatings</td>
<td>Contains &lt; 5%?</td>
<td>Yes</td>
<td>✔️</td>
</tr>
<tr>
<td>Indium Tin oxide (ITO)</td>
<td>Contains &lt; 25%?</td>
<td>Yes</td>
<td>✔️</td>
</tr>
<tr>
<td>Printed Circuit Board</td>
<td>Contains &lt; 71%?</td>
<td>Yes</td>
<td>✔️</td>
</tr>
<tr>
<td>Mercury</td>
<td>Contains &lt; 33%?</td>
<td>Yes</td>
<td>✔️</td>
</tr>
</tbody>
</table>
The Circularise Digital Twin

<table>
<thead>
<tr>
<th>POLYMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Covestro</strong></td>
</tr>
<tr>
<td>Token ID: 0xe0...AB94</td>
</tr>
<tr>
<td>🗂 25 kg</td>
</tr>
<tr>
<td>⚖️ Mass Balance</td>
</tr>
</tbody>
</table>

**ACCESS VIA SMART QUESTIONING**

- 📈 Product Name
- 🗒️ Manufacturing Site
- 🌱 Recycled Content
- ☀️ Energy Consumption
- 🌧️ Water Usage
- 🌱 CO₂e Emissions
- 🛠️ Hazardous Substances
- ✨ Certifications

**Token history**

- 12/10/2021, 18:12
  - Raw Material DA sent
- 01/10/2021, 15:40
  - Raw Material DA created, token ID created
## Blockchain and its differences

<table>
<thead>
<tr>
<th></th>
<th>Competitors</th>
<th>Circularise Today</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blockchain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>Decentralisation &amp;</td>
<td>x Weak</td>
<td>✓ Strong</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy &amp; Confidential</td>
<td>x Weak</td>
<td>✓ Strong</td>
</tr>
<tr>
<td>Protection</td>
<td>- Traditional</td>
<td></td>
</tr>
<tr>
<td>Support for an open</td>
<td>x Weak</td>
<td>✓ Strong</td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WHAT CAN WE LEARN FROM CIRCULARISE

Lessons learned

Smart Questioning
- Patent pending privacy technology

Protocol layer for everyone
- Open infrastructure approach

Closed Approach
- Uber vs lyft

Open Infrastructure Approach
- SIMILAR TO: IMAP & SMTP PROTOCOL
  - Outlook
  - Gmail
  - Apple Mail

Ingredients | Questions? | Answer | Proof valid?
---|---|---|---
Brontide | Contains < 5% | Yes | ✔
Copper | Contains 20% | No | ✔
Cadmium | Contains < 1% | No | ✔
Fluorescent coatings | Contains < 0% | Yes | ✔
Indium In oxide (ITO) | Contains 15% | Yes | ✔
Printed Circuit Board | Contains < 15% | Yes | ✔
Mercury | Contains < 33% | Yes | ✔
Thank you