ORBIT

PEF • CIRCULARITY • ECO-DESIGN

Connecting environmental evidence, digital product information and eco-design decisions

4 SECTORS • 1 PRACTICAL PATHWAY

- **TEXTILES**
- **PLASTICS & PACKAGING**
- **CHEMICALS**
- **ICT & WEEE**

7 PROJECT OBJECTIVES

1. Advance PEF Knowledge Base and Sector-Specific Rules
2. Demonstrate PEF Through Full Life Cycle Assessments
3. Develop FAIR-Compliant Datasets and Digital Decision-Support Tools
4. Derive Eco-design Requirements and Compliance Pathways
5. Validate and Evaluate Tools and Mechanisms
6. Foster Skills, Guidance, and Uptake Across the Value Chain
7. Ensure Open, FAIR, and Impactful Dissemination and Policy Alignment

6 PROJECT INNOVATIONS

1. Data Infrastructure & AI for LCA
2. PEF Methods & Category Rules
3. Eco-Design Decision Support & XAI
4. Digital Product Passports & Regulatory Compliance
5. Stakeholder Engagement & Capacity Building
6. Policy Integration & Standards Alignment

ORBIT READINESS PATHWAY

1. **DATA & AI PLATFORM** — TRL 3 → 7
2. **PEF METHODS & RULES** — TRL 2 → 7
3. **ECO-DESIGN XAI ASSISTANT** — TRL 3 → 7
4. **DPP & COMPLIANCE** — TRL 3 → 6
5. **STAKEHOLDER UPTAKE** — SRL 2 → 7
6. **POLICY & STANDARDS** — UPTAKE ENABLER

6 innovation families advancing from research foundations to validated uptake

TRL = Technology Readiness Level • SRL = Social Readiness Level

THE ORBIT CONSORTIUM

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