HORIZON EUROPE · CLEAN INDUSTRIAL DEAL 2026

Circular materials from complex waste streams

Industrial Symbiosis

Recovering rubber, polymers & metals from end-of-life tyres, footwear and textiles — for urban, construction and industrial applications.

Carlos Correia | Project Developer · Materials Engineer · Portugal

THE PROBLEM

Billions of kg. No scalable recovery pathway.

End-of-life tyres

3.4 Mt

Generated annually in Europe.
Rubber + metal + fibres lost.

Footwear soles

~700 kt

EU footwear waste per year.
Polymer fraction unrecovered.

Textile residues

>12 Mt

EU textile waste annually.
Fibre reinforcement unused.

Wood residues

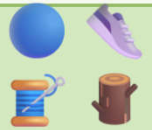
~55 Mt

Industrial wood waste in EU.
Cellulose for reinforcement.

Most ends in landfill or incineration — no material value recovery

THE SOLUTION

Engineered composites for urban, construction & industrial use



Waste inputs

Tyres · Soles
Textiles · Wood

Processing

Shredding · Separation
Compounding

Composites

Rubber-polymer
Wood-fibre panels

Applications

- Urban furniture & street fittings
- Fence posts & civil infrastructure
- Construction insulation panels
- Acoustic panels (wood-fibre composites)
- Asphalt modification
- Manhole covers — cast iron replacement
- Anti-vibration industrial pads
- Impact-absorbing walkways & platforms

VALUE PROPOSITION

Why this project. Why now.

✓ Replaces virgin raw materials

Rubber, metal & polymer recovered and reintroduced into industrial value chains

✓ Diverts complex waste from landfill

Direct contribution to EU waste targets and circular economy strategy

✓ Replaces cast iron components

Lighter, corrosion-resistant composites for utility & municipal infrastructure

✓ EU Taxonomy aligned

Circular economy, climate mitigation, DNSH compliant

✓ Multi-stream waste valorisation

Four complementary waste flows processed in industrial symbiosis

✓ Clean Industrial Deal ready

Advanced materials, decarbonisation, strategic value chains

SEEKING PARTNERS

★ HORIZON EUROPE

Build this consortium with us

Industrial processors

Rubber, polymer & composite manufacturers

Municipalities

Urban planners & utility operators

R&D organisations

Universities & technology centres

Certification bodies

Standards & product validation

Technology providers

Waste pre-processing & compounding

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"Turning complex waste streams into engineered industrial value."