UPNOWASTE – WP2

Activity 3: Preparation of common methodology for reuse/recycling

Best practices template and guidelines

The aim of this template is to have a common structure for a best practice about reuse/recycle of materials selected in the previous project activity “Analysing Reuse/Recycling Activities of Materials”. Each partner will research and find two examples from its local community or at national level according to this table:

- ULE: wood
- ULE: plastic
- TREBAG: paper
- ITI: metals
- GEA: textile
- GL: glass
- UMT: electronics

From the examples selected, a report with a common methodology for reuse/recycling of any material will be drafted.

BEST PRACTICE EXAMPLE #1

Combination ID	013
Country	Slovenia
Type of material	Textiles
Organization / Institution / Association	Zavod GEA, zavod za psihosocialno svetovanja in socialne inovacije **(GEA)**
Title / Name of the activity	Resyntex Pilot Plant (IOS Ltd.)
Abstract	Resyntex is a Slovenian pilot plant operated by IOS Ltd. to chemically recycle diverse textile waste streams—cotton, wool, PET, PA, and blends—transforming them into feedstock for new fibres or green polymers. It's part of wider efforts to close the loop on textiles using advanced recycling technologies (SRIP - Krožno gospodarstvo).
Keywords	Chemical recycling, textile blends, pilot plant, PET depolymerization, feedstock
Objectives	• Convert non-wearable textile waste into new raw materials • Validate processes that can scale into market-ready technology for chemical recycling • Integrate textile and plastic recycling through PET depolymerization
Methodology	• Collection of textile waste and mixed feedstock • Chemical treatment (e.g., depolymerization of PET and related components) • Process optimization for cellulose and mixed-fiber recycling • Pilot-scale trials, with transitions toward

	broader waste types (plastic, paper) (SRIP - Krožno gospodarstvo)
Technological requirements / Tools needed	• Chemical reactors for depolymerization • Material separation/pretreatment systems • Analytical labs to measure output quality and purity • Research capabilities to refine processes for diverse waste types (SRIP - Krožno gospodarstvo)
Why is this reuse/ recycle action considered good practice?	• Tackles complex blended textile waste using a scalable chemical pathway • Bridges the gap between lab research and commercial deployment • Enables recovery of value across diverse waste streams—cotton, polyester, wool
Additional information (website, contact, references, etc.)	• **Initiative**: Part of Slovenia's SRIP Circular Economy ecosystem (SRIP - Krožno gospodarstvo) **References**: Resyn

BEST PRACTICE EXAMPLE #2

Combination ID	013
Country	Slovenia
Type of material	Textiles
Organization / Institution / Association	Zavod GEA, zavod za psihosocialno svetovanja in socialne inovacije **(GEA)**
Title / Name of the activity	Knof – Stara Šola Reuse Boutiques & Circular Lab
Abstract	Knof, a social enterprise founded in 2011, operates six "Stara Šola" reuse boutiques across Slovenia. They accept donated clothes, rigorously sort and refurbish them, and resell them as quality second-hand items. Expanding beyond retail, they've established a "Circular Lab" in Krško that combines coworking, sewing and carpentry workshops, and prototyping space to turn textile waste into new-value products (texfash.com, BETI Textile Industry).
Keywords	Textile reuse, social enterprise, upcycling, circular lab, Krško, Knof
Objectives	• Prolong the lifespan of clothing • Create social and green jobs for disadvantaged groups • Shift public perception of second-hand from "poor person's clothes" to a desirable, sustainable choice
Methodology	• Collection: Donations from locals • Sorting: Vetting for quality and upcycling potential • Retail: Selling curated items through six boutiques • Prototyping: Using workshops (sewing, carpentry) in the Circular Lab to develop new products from textile waste
Technological requirements / Tools needed	• Sorting facilities for quality assessment • Sewing machines, workshop tools, small-scale manufacturing equipment • Dedicated space (~3,000 m²) for lab and

	workshop operations (texfash.com)
Why is this reuse/ recycle action considered good practice?	• Integrates social impact (employment for marginalized groups) with environmental goals • Offers a real-life circular model—from donation to retail to upcycling • Shifts cultural mindset around second-hand clothing while maintaining economic sustainability
Additional information (website, contact, references, etc.)	• **Website**: Explained via TexFash article and Knof's own communications (texfash.com) • **Contact**: Director Mojca Žganec Metelko (through Knof) • **References**: Knof reuse boutiques; Circular Lab initiative in Krško (texfash.com