Overview of projects funded by Refashion

As part of the Industrial Challenge and Innovation Challenge calls for projects since 2010

Challenge Industriel
Re_fashion

KEY

Strategic line
- Automated sorting and preprocessing for recycling
- Recycling of CHF

Category of products concerned
- Textiles
- Footwear

N°	Project leader name Project name	Project	Region / Country	CFP	Strat. line	Status
1	**DAGOBAIRE** DAGOFELT	Installation of a complete tearing and non-woven production line for the insulation market.	Hauts-de-France	2024	+	NEW
2	**DELORGE RECYCLING** ENHANCED SORTING AND CUTTING	Installation of an automated optical sorting line and cutting machines for recycling non-reusable used textiles, mainly for the non-wovens market.	Belgique	2024	+	NEW
3	**ESSAIMONS** ECOTEX LOOP	Implementing and industrially deploying an automated sorting line using spectral recognition to prepare 10,000 to 12,000 tonnes of textiles a year mainly for closed-loop recycling.	Nouvelle Aquitaine	2024		NEW
4	**NOUVELLES FIBRES TEXTILES** PARETO	Development of the current demonstrator and creation of an industrial-scale plant for automated sorting of textiles by composition and colour, and preparation for recycling (trims removal and tearing).	Auvergne-Rhône-Alpes	2024		NEW
5	**RECYCL'OCC** RECYCLOCAL TEXTILES	Creation of an industrial unit for automated sorting and material preparation for recycling (trims removal) of post-consumer used textiles.	Occitanie	2024		NEW
7	**VOSGES TLC** LE TRI DES FIBRES DANS LE 88	Installation of an automated optical sorting line for non-reusable used textiles by composition and colour, to direct them towards high-quality recycling outlets in France.	Grand Est	2024		NEW

Challenge Innovation
Re_fashion

KEY

Strategic line
- Eco-design of products from the CHF sector
- Preparati on of materials for recycling
- Recycling and/or incorporation of recycled materials from CHF

Status
- Projects abandoned/inconclusive results
- Projects finalized/conclusive results with validated prototype
- Projects in progress
- Projects finalized/industrial pilots validated

Category of products concerned
- Textiles
- Footwear

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1	**BIC** ISOKTEX	Developing an innovative textile insulation.	Auvergne-Rhône-Alpes	2010		
2	**NOVAFLOOR** NOVATEX	Incorporating end-of-life textiles as inert fillers in decorative plates.	Hauts-de-France	2010		
3	**DECATHLON** OXYLANE	Manufacturing polyester yarn from post-consumer polyester textiles.	Hauts-de-France	2010	+	
4	**PÔLE ÉCO-INDUSTRIES POITOU-CHARENTES** MULTITEX	Developing a process for chemical separation of used mixed textiles.	Nouvelle Aquitaine	2011		
13	**PÔLE ÉCO INDUSTRIES POITOU-CHARENTES** MULTITEX 2	Feasability study of a pilot enabling the chemical separation of used mixed textile materials.	Nouvelle Aquitaine	2013		
5	**FILATURES DU PARC** FILATURES DU PARC	Manufacturing recycled wool yarns of the same quality as yarns made with virgin wool fibres.	Occitanie	2011		
6	**TRUCS-TROUVAILLES** TRUCS-TROUVAILLES	Recycling rubber soles into new soles.	Île-de-France	2011		
7	**AGENCE AIR COOP** FOOTWEAR RECYCLING PROJECT	Developing and testing an industrial grinding and separation process in view of creating a footwear recycling pilot line.	Auvergne-Rhône-Alpes	2012	+	
18	**AGENCE AIR COOP** FOOTWEAR RECYCLING PILOT LINE	Improving the purity of the resulting materials (leather/rubber) and output from the recycling line.	Auvergne-Rhône-Alpes	2014	+	
8	**FRAMIMEX** VIACOVER	Developing an exterior sound insulation shield in lightweight concrete integrating post-consumer textile fibres.	Hauts-de-France	2012		
9	**FEYECON SEPAREX** DECOTEX 1	Developing an undyeing process for used polyester clothes to enable their recycling.	Grand Est	2012		
21	**SEPAREX** DECOTEX 2	Moving the DécoTex I project (FEYECON) - supercritical CO_2 undyeing technology to pilot scale.	Grand Est	2015		
10	**CC PAYS DE COLOMBEY & SUD TOULOIS** RECYTEX	Technical, economical and commercial feasibility study of creating a rigid decorative tile integrating 20 to 50% of used textiles.	Grand Est	2012		

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11	**PRÉMICES & CO.** BÉTON DE CHIFFON	Creating a range of decorative acoustic products entirely made from recycled textiles.	Île-de-France	2013		⏸
27	**PRÉMICES & CO.** PIERRE PLUME	Finishing the «Béton de chiffon» project and developing it to industrial scale.	Île-de-France	2016		✓
12	**MAPEA** ÉCO-CHARGES	Recycling of used cotton and polycotton clothes for use as reinforcement in the plastics industry.	Auvergne-Rhône-Alpes	2013		✓
14	**LE RELAIS** EKOROOM	Developing acoustic suspended ceiling tiles from recycled textiles.	Hauts-de-France	2014		✗
15	**FILATURES DU PARC** PARCOT	Developing a defibration method for recycling used polycotton clothes into materials suitable for weaving or knitting new clothing products.	Occitanie	2014		✓
16	**MINOT RECYCLAGE TEXTILE** MINOT RECYCLAGE TEXTILE	Optimising the end-of-life textiles recycling process in order to achieve a higher percentage of used textiles in the garnetting process.	Hauts-de-France	2014		✗
17	**CHAUSSETTES ORPHELINES** ANIMA	Recycling used socks into a recycled yarn for use in hosiery.	Île-de-France	2014	+	✓
19	**WECOSTA** SILENCIO	Developing an eco-friendly acoustic silencer for housing ventilation systems.	Hauts-de-France	2015		✓
20	**IN SOFT** ECTOR	Developing an eco-designed shoe with a knitted fabric upper.	Auvergne-Rhône-Alpes	2015		✓
34	**IN SOFT** ECTOR SE RECYCLE	Recycling the Ector eco-designed shoes.	Auvergne-Rhône-Alpes	2017		✗
22	**SYNERGIES TLC** AUTOTRI	Studying and developing a new sorting method for non reusable textiles in oder to use these secondary materials.	Auvergne-Rhône-Alpes	2015		✗
23	**CETI** DELISS	Studying and developing either automatic or semi-automatic processes for removing trims from used clothing to facilitate recycling.	Hauts-de-France	2016		⏸
24	**CTC GROUPE** THERMICUIR	Recovering heat from waste leather from end-of-life shoes.	Auvergne-Rhône-Alpes	2016		⏸
25	**LA MANUFACTURE GROUPE ERAM** DESIGN FOR REPAIR	Developing a new design and manufacturing process allowing for easy disassembly of all components in a shoe at end of life.	Pays de la Loire	2016		✓
26	**L'ÉQUIPE 1083** JEANS RECYCLÉS	Developing a recycled cotton yarn from old jeans.	Auvergne-Rhône-Alpes	2016	+	✓
28	**SILAC INDUSTRIE** ECO3F	Making a range of acoustic insulation for the automotive industry from used textile materials.	Nouvelle Aquitaine	2016		✓
29	**IFTH / UTT / LE RELAIS** CAREFIL	Improving the quality of yarns made from recycled used clothes.	Hauts-de-France	2017	+	✓

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30	**CID PROCESS** CID PROCESS	Mechanical separation of cotton and elastane in used jeans.	Auvergne-Rhône-Alpes	2017		✗
31	**L'ÉQUIPE 1083** CELL-JEANS	Wet-spinning cotton waste from used jeans in order to create a man-made cellulosic fibre.	Auvergne-Rhône-Alpes	2017		⏸
32	**CAMY** HODEI	Designing and developing a modular, monomaterial and recyclable shoe.	Île-de-France	2017		⏸
33	**AUDACIE** PLAS'TILE	Recycling used non-reusable textiles into plastic resins.	Nouvelle Aquitaine	2017		✓
35	**AGENCE AIR COOP** REVIVE/RECYCLE	Setting up a pilot project for repairing used clothes and preparing them for recycling.	Espagne	2017		✓
36	**LES TISSAGES DE CHARLIEU** LES TISSAGES DE CHARLIEU	Improving, in terms of technology and industrial process, an article entirely made of recycled post-consumer intra-European polyester, and assessing the difference between cost price and market price.	Auvergne-Rhône-Alpes	2017		✗
37	**AUCHAN** RECYC'LAB	Recovering fibres from end-of-life clothing into mobile phone cases using the Roctool induction heating technology.	Hauts-de-France	2018		✗
38	**DECATHLON** 4RFID	Developing a pilot to achieve textiles' traceability, allowing for their end-of-life management, thanks to the RFID technology.	Hauts-de-France	2018	+	✓
39	**FCBA** MOBIOTEX	Assessing the possibilities of using recycled textile fibres as an essential component of wood framed constructions.	Île-de-France	2018		⏸
40	**MAXIMUM** TISSIUM	Developing a rigid material made from textile waste fibres intended for furniture manufacturing for the tertiary sector.	Île-de-France	2018		⏸
56	**MAXIMUM** TISSIUM INDUSTRIE	Development of a pilot production unit of the rigid composite material Tissium, made from recycled textile waste, in the form of machinable panels for the furniture and furnishing markets.	Île-de-France	2021		✓
41	**TECHTERA** JEPLAN	Assessing the reliability of an implantation project in France of a JEPLAN's plant for recycling used polyester textiles into recycled PET pellets.	Auvergne-Rhône-Alpes	2018		⏸
42	**VERT-TICAL NORD** ÉCO-LOGIC WALL	Developing a green wall using recycled textiles to replace substrates and sphagnum (natural moss) currently used.	Hauts-de-France	2018		⏸
55	**VERT-TICAL NORD** SOLIOTI	Development of a full size (> 50m2) green wall demonstrator integrating a recycled textile nonwoven and an optimised watering system.	Hauts-de-France	2020		✗
43	**WECOSTA** QWIET	Developing solutions to improve the acoustic comfort in public spaces (offices, industrial premises, etc.) by using ecological materials including materials from the used textiles sector.	Hauts-de-France	2018		✓
44	**CYCL-ADD** TEXTIC	Developing a recycling process for used non reusable polyamide clothing, including sorting, trimming, characterisation, micronization and compounding for plastics making.	Auvergne-Rhône-Alpes	2019	+	✓
45	**FABBRICK** FABBRICK	Developing a structural, insulating and aesthetic construction material from recycled used textiles.	Île-de-France	2019		✓
46	**FILATURES DU PARC** PAMREC	Recycling used polyamide clothes into a recycled yarn for use in textile products.	Occitanie	2019		✓

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47	**HUMEAU BEAUPRÉAU** CIRCULAR BOOT (REBOOT)	Pre-study on the feasibility and cost of recycling used PVC footwear; and testing of a recycling loop with defining specifications for setting up the recycling loop at an industrial scale.	Pays de la Loire	2019	↻ + ⑂	II
48	**IDELAM** RECHAUSS	Developing an innovative technology for delaminating shoes (leather/textile) by supercritical fluid and a new recycling loop for used shoes.	Nouvelle Aquitaine	2019	▭	II
68	**IDELAM** RECHAUSS 2	Completion of the study on the delamination of non-reusable post-consumer footwear using the IDELAM process, focusing on the recyclability of delaminated materials and optimization of the process.	Nouvelle Aquitaine	2024	▭ + ⑂	NEW
49	**LE SLIP FRANÇAIS** LE SLIP CIRCULAIRE	Developing a yarn containing the highest possible % of recycled cotton with a fineness up to 1/60Nm from used underwear and socks for use in the making of Le Slip Français' products.	Île-de-France	2019	↻ + ⑂	II
50	**SYNERGIES TLC** UTILE	Feasibility study of setting an industrial unit for the trimming and sorting of used cotton, polyester and polyamide textiles (100% and blends), based on materials specifications defined with recyclers.	Auvergne-Rhône-Alpes	2019	▭	✓
51	**VALVAN** TRIMCLEAN	Development of an automated integrated solution that allows the removal of trims (including labels, buttons, zippers etc.) from used clothing.	Belgique	2019	▭	✓
52	**LA MANUFACTURE GROUPE ERAM** ZAPATEKO II	Development of a demonstrator for disassembling non-reusable footwear via automated sorting and assisted pulling.	Pays de la Loire	2020	▭	✓
53	**NOLT (PHENIX SPORT)** R-SHAPE	Developing a demonstrator for recycling non-reusable polyester sportswear into a plastic composite material used to create sport accessories for sports clubs.	Provence-Alpes-Côte-d'Azur	2020	⑂	✓
54	**SOEX** TexID	Developing an automated sorting pilot line for textile materials recognition though NIR spectroscopy to the industrial scale.	Allemagne	2020	▭	✓
57	**THE 8 IMPACT** THE 8 IMPACT	Building a demonstrator using EVA (elastomeric polymer) derived from the recycling of used sneakers' outsoles to make underlay for parquet flooring.	Auvergne-Rhône-Alpes	2021	▭ + ⑂	II
58	**CEA** MISTERY	Prototyping the use of multispectral optical sensors for the characterization of used household textiles.	Auvergne-Rhône-Alpes	2021	▭	II
59	**INDUO** GREENCOSE	Testing the Greencose chemical recycling process on cotton-rich used textiles feedstock.	Hauts-de-France	2021	⑂	II
60	**RECYC'ELIT** AURAREFIL	Adapting the Recyc'Elit chemical recycling process to transform post-consumer non-reusable polyester textiles (pure and blended) into recycled polyester threads.	Auvergne-Rhône-Alpes	2021	⑂	II
61	**NOLT** LE MAILLOT INFINI	Chemical recycling of post-consumer polyester sportswear to create a recycled polyester yarn and ultimately new sportswear.	Provence-Alpes-Côte-d'Azur	2023	↻ + ⑂	II
62	**CEA** UPNYL-TEX	Chemical recycling of polyamides from non-reusable post-consumer textiles to create new high-value materials that can be used in other industries.	Île-de-France	2023	⑂	II
63	**WECOSTA** INJECTIL	Thermo-mechanical characterization of injected products derived from recycled post-consumer textile materials, via a proprietary injection process.	Hauts-de-France	2023	⑂	➡
64	**LA MANUFACTURE GROUPE ERAM** PURE	Recycling of polyurethane foams from post-consumer footwear mixed with footwear production waste to create foam substrates that can be incorporated into new shoes.	Pays de la Loire	2023	↻ + ⑂	➡
65	**CANOE** CALICO	Recycling and high added value recovery of non-reusable post-consumer acrylic textiles into carbon fibers.	Nouvelle Aquitaine	2024	⑂	NEW
66	**MUOVI** VALOTEX PES	Thermomechanical recycling of different non-reusable post-consumer polyester textiles, characterization of the resulting recycled materials, and evaluation of their potential applications.	Grand Est	2024	⑂	NEW
67	**SYNTETICA** SYNTETICA	Chemical recycling of non-reusable post-consumer tights to produce 100% recycled nylon yarn and create new pairs of tights, in close collaboration with DIM Brands International.	Grand Est	2024	⑂	NEW
69	**PLAS'TRI** IDENTIFICATION NOIR & MULTICOUCHES	Development of a new method to identify the material composition of black non-reusable post-consumer textiles/footwear and multilayered textiles.	Auvergne-Rhône-Alpes	2024	▭	NEW
70	**RE-FRESH GLOBAL** OPEN & CLOSED LOOP	Utilization of Re-Fresh Global's patented biotechnological process for fiber separation, boosting the recycling of non-reusable post-consumer textile waste, with a hight conversion rate.	Allemagne	2024	▭ + ⑂	NEW