

# Overview of projects funded by Refashion

since 2010 within the Innovation Challenge

## KEY

### Strategic line

- Eco-design of products from the CHF sector
- Preparation 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

N°	Project leader name Project name	Project	Contact / Mail	CFP	Strat. line	Status
1	BIC ISOKTEX	Developing an innovative textile insulation.	Michel KEKAYAS m.kekayas@cobic.fr	2010		
2	NOVAFLOOR NOVATEX	Incorporating end-of-life textiles as inert fillers in decorative plates.	Vincent FORGET vf@ecolomy.com	2010		
3	DECATHLON OXYLANE	Manufacturing polyester yarn from post-consumer polyester textiles.	Raffaele DUBY raffaele.duby@decathlon.com	2010		
4	PÔLE ÉCO-INDUSTRIES POITOU-CHARENTES MULTITEX	Developing a process for chemical separation of used mixed textiles.	Damien DELETRAZ d.deletraz@pole-ecoindustries.fr	2011		
13	PÔLE ÉCO INDUSTRIES POITOU-CHARENTES MULTITEX 2	Feasibility study of a pilot enabling the chemical separation of used mixed textile materials.	Damien DELETRAZ d.deletraz@pole-ecoindustries.fr	2013		
5	FILATURES DU PARC FILATURES DU PARC	Manufacturing recycled wool yarns of the same quality as yarns made with virgin wool fibres.	Fabrice LODETTI filatures.parc@wanadoo.fr	2011		
6	TRUCS-TROUVAILLES TRUCS-TROUVAILLES	Recycling rubber soles into new soles.	Sylvie DAMERON sylvie.dameron@gmail.com	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.	Benjamin MARIAS bm@air.coop	2012		
18	AGENCE AIR COOP FOOTWEAR RECYCLING PILOT LINE	Improving the purity of the resulting materials (leather/rubber) and output from the recycling line.	Benjamin MARIAS bm@air.coop	2014		
8	FRAMIMEX VIACOVER	Developing an exterior sound insulation shield in lightweight concrete integrating post-consumer textile fibres.	Mehdi ZERROUG mehdi.zerroug@ecotextile.fr	2012		
9	FEYECON SEPAREX DECOTEX 1	Developing an undyeing process for used polyester clothes to enable their recycling.	Daniéla TRAMBITAS daniela.trambitas@feyecon.com	2012		
21	SEPAREX DECOTEX 2	Moving the DécoTex I project (FEYECON) - supercritical CO <sub>2</sub> undyeing technology to pilot scale.	Daniéla TRAMBITAS daniela.trambitas@feyecon.com	2015		
10	CC PAYS DE COLOMBEY & SUD TOULOUS RECYTEX	Technical, economical and commercial feasibility study of creating a rigid decorative tile integrating 20 to 50% of used textiles.	Raphaël KUENY raphael.kueny@univ-lorraine.fr	2012		

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11	PRÉMICES & CO. BÉTON DE CHIFFON	Creating a range of decorative acoustic products entirely made from recycled textiles.	Amandine LANGLOIS amandine@premicesandco.com	2013		
27	PRÉMICES & CO. PIERRE PLUME	Finishing the «Béton de chiffon» project and developing it to industrial scale.	Amandine LANGLOIS amandine@premicesandco.com	2016		
12	MAPEA ÉCO-CHARGES	Recycling of used cotton and polycotton clothes for use as reinforcement in the plastics industry.	René GENILLON r.genillon@mapea.com	2013		
14	LE RELAIS EKOROOM	Developing acoustic suspended ceiling tiles from recycled textiles.	Jean-Paul LOPEZ jplopez@lerelais.org	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.	Fabrice LODETTI filatures.parc@wanadoo.fr	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 garning process.	Jean-Luc DUSSART jldussart@lerelais.org	2014		
17	CHAUSSETTES ORPHELINES ANIMA	Recycling used socks into a recycled yarn for use in hosiery.	Marcia DE CARVALHO contact@marciadecarvalho.fr	2014		
19	WECOSTA SILENCIO	Developing an eco-friendly acoustic silencer for housing ventilation systems.	Hugues BROUTÉ hbroute@wtxautomotive.com	2015		
20	IN SOFT ECTOR	Developing an eco-designed shoe with a knitted fabric upper.	Patrick MAINGUENÉ pamainguene@in-soft.fr	2015		
34	IN SOFT ECTOR SE RECYCLE	Recycling the Ector eco-designed shoes.	Patrick MAINGUENÉ pamainguene@in-soft.fr	2017		
22	SYNERGIES TLC AUTOTRI	Studying and developing a new sorting method for non reusable textiles in order to use these secondary materials.	Thomas FRAINEUX thomas.fraineux@synergiestlc.fr	2015		
23	CETI DELISS	Studying and developing either automatic or semi-automatic processes for removing trims from used clothing to facilitate recycling.	Pascal DENIZART pascal.denizart@ceti.com	2016		
24	CTC GROUPE THERMICUIR	Recovering heat from waste leather from end-of-life shoes.	Régis LETY rlety@ctcgroupe.com	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.	Gauthier BEDEK gbedek@eram.fr	2016		
26	L'ÉQUIPE 1083 JEANS RECYCLÉS	Developing a recycled cotton yarn from old jeans.	David LEROMAIN david@1083.fr	2016		
28	SILAC INDUSTRIE ECO3F	Making a range of acoustic insulation for the automotive industry from used textile materials.	Valéran HIEL vhiel@silacindustrie.com	2016		
29	IFTH / UTT / LE RELAIS CAREFIL	Improving the quality of yarns made from recycled used clothes.	Philippe MESNAGE pmesnage@ifth.org	2017		

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30	 <b>CID PROCESS</b> CID PROCESS	Mechanical separation of cotton and elastane in used jeans.	Roland GUIBERT roland.guibert@wanadoo.fr	2017		
31	 <b>L'ÉQUIPE 1083</b> CELL-JEANS	Wet-spinning cotton waste from used jeans in order to create a man-made cellulosic fibre.	David LEROMAIN david@1083.fr	2017		
32	 <b>CAMY</b> HODEI	Designing and developing a modular, monomaterial and recyclable shoe.	Benjamin CAMY benjamin@hodei.fr	2017		
33	 <b>AUDACIE</b> PLAS'TILE	Recycling used non-reusable textiles into plastic resins.	Charlotte WALLET c.wallet@audacie.org	2017		
35	 <b>AGENCE AIR COOP</b> REVIVE/RECYCLE	Setting up a pilot project for repairing used clothes and preparing them for recycling.	Virgile AYMARD va@air.coop	2017		
36	 <b>LES TISSAGES DE CHARLIEU</b> 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.	Éric BOËL e-boel@ltc-jacquard.com	2017		
37	 <b>AUCHAN</b> RECYCLAB	Recovering fibres from end-of-life clothing into mobile phone cases using the Roctool induction heating technology.	Isabelle DAYDE idayde@auchan.fr	2018		
38	 <b>DECATHLON</b> 4RFID	Developing a pilot to achieve textiles' traceability, allowing for their end-of-life management, thanks to the RFID technology.	Stéphanie BAILLY stephanie.bailly@decathlon.com	2018		
39	 <b>FCBA</b> MOBIOTEX	Assessing the possibilities of using recycled textile fibres as an essential component of wood framed constructions.	Zaratiana MANDRARA zaratiana.Mandrara@fcba.fr	2018		
40	 <b>MAXIMUM</b> TISSIUM	Developing a rigid material made from textile waste fibres intended for furniture manufacturing for the tertiary sector.	Romée DE LA BIGNE romee@maximum.paris	2018		
56	 <b>MAXIMUM</b> 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.	Romée DE LA BIGNE romee@maximum.paris	2021		
41	 <b>TECHTERA</b> JEPLAN	Assessing the reliability of an implantation project in France of a JEPLAN's plant for recycling used polyester textiles into recycled PET pellets.	Julie RAFTON - JOLIVET jrafton@techtera.org	2018		
42	 <b>VERT-TICAL NORD</b> ÉCO-LOGIC WALL	Developing a green wall using recycled textiles to replace substrates and sphagnum (natural moss) currently used.	Frédéric LOGEZ contact@vert-tical.fr	2018		
55	 <b>VERT-TICAL NORD</b> SOLIOTI	Development of a full size (> 50m <sup>2</sup> ) green wall demonstrator integrating a recycled textile nonwoven and an optimised watering system.	Frédéric LOGEZ contact@vert-tical.fr	2020		
43	 <b>WECOSTA</b> 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.	Hugues BROUTÉ hbroute@wtxautomotive.com	2018		
44	 <b>CYCL-ADD</b> TEXTIC	Developing a recycling process for used non reusable polyamide clothing, including sorting, trimming, characterisation, micronization and compounding for plastics making.	Hervé GUERRY hguerry@cycl-add.fr	2019		
45	 <b>FABBRICK</b> FABBRICK	Developing a structural, insulating and aesthetic construction material from recycled used textiles.	Clarisse Merlet clarisse.merlet@fabbrick.fr	2019		
46	 <b>FILATURES DU PARC</b> PAMREC	Recycling used polyamide clothes into a recycled yarn for use in textile products.	Fabrice LODETTI filatures.parc@wanadoo.fr	2019		

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47	 <b>HUMEAU BEAUPRÉAU</b> 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.	Anne-Céline Humeau ac.humeau@bopy.fr	2019		
48	 <b>IDELAM</b> RECHAUSS	Developing an innovative technology for delaminating shoes (leather/textile) by supercritical fluid and a new recycling loop for used shoes.	Eric DURIVAUT eric.durivault@idealtechnologies.fr	2019		
49	 <b>LE SLIP FRANÇAIS</b> 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.	Solène NAEYE solene.naeye@leslipfrancais.fr	2019		
50	 <b>SYNERGIES TLC</b> 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.	Clara POTTON c.potton@synergies-tlc.com	2019		
51	 <b>VALVAN</b> TRIMCLEAN	Development of an automated integrated solution that allows the removal of trims (including labels, buttons, zippers etc.) from used clothing.	Maurits VANDEPUTTE maurits.vandeputte@valvan.com	2019		
52	 <b>LA MANUFACTURE GROUPE ERAM</b> ZAPATEKO II	Development of a demonstrator for disassembling non-reusable footwear via automated sorting and assisted pulling.	Gauthier BEDEK gbedek@eram.fr	2020		
53	 <b>NOLT (PHENIX SPORT)</b> R-SHAPE	Developing a demonstrator for recycling non-reusable polyester sportswear into a plastic composite material used to create sport accessories for sports clubs.	Paul-Emmanuel GUINARD paul@phenix-sport.com	2020		
54	 <b>SOEX</b> TexID	Developing an automated sorting pilot line for textile materials recognition through NIR spectroscopy to the industrial scale.	Louisa TEMAL temal@ico-spirit.com	2020		
57	 <b>IMPACTE CAPITAL</b> REVIVAL	Building a demonstrator using EVA (elastomeric polymer) derived from the recycling of used sneakers' outsoles to make underlay for parquet flooring.	Hélène GUERRET helene@impacte.capital	2021		
58	 <b>CEA</b> MISTERY	Prototyping the use of multispectral optical sensors for the characterization of used household textiles.	Gaël PARENT gael.parent@cea.fr	2021		
59	 <b>INDUO</b> GREENCOSE	Testing the Greencose chemical recycling process on cotton-rich used textiles feedstock.	Sébastien FRANCOIS sebastien@induo.fr	2021		
60	 <b>RECYC'ELIT</b> AURAREFIL	Adapting the Recyc'Elit chemical recycling process to transform post-consumer non-reusable polyester textiles (pure and blended) into recycled polyester threads.	Raouf MEDIMAGH r.medimagh@recyc-elit.com	2021		
61	 <b>NOLT</b> LE MAILLOT INFINI	Chemical recycling of post-consumer polyester sportswear to create a recycled polyester yarn and ultimately new sportswear.	Paul GUINARD paul@wearenolt.com	2023		<b>NEW</b>
62	 <b>CEA</b> 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.	Marie KOBYLARSKI marie.kobylarski@cea.fr	2023		<b>NEW</b>
63	 <b>WECOSTA</b> INJECTIL	Thermo-mechanical characterization of injected products derived from recycled post-consumer textile materials, via a proprietary injection process.	Paul DUCOULOMBIER p.ducoulombier@wtxautomotive.com	2023		<b>NEW</b>
64	 <b>LA MANUFACTURE GROUPE ERAM</b> 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.	Gauthier BEDEK gbedek@eram.fr	2023		<b>NEW</b>