

SORTING FOR CIRCULARITY EUROPE

PROJECT FINDINGS HIGHLIGHT IMMENSE OPPORTUNITY TO ACCELERATE TEXTILE RECYCLING

27 SEPTEMBER 2022

AMSTERDAM - Today, Fashion for Good concludes the Sorting for Circularity Europe project, and in collaboration with Circle Economy, releases a report detailing the findings of the 16-month analysis. The analysis indicates that 74%, a total of 494,000 tonnes, of low-value, post-consumer textiles¹ is readily available for fibre-to-fibre recycling in six European countries. This represents the potential to generate an additional €74 million per year in value by reintroducing sorted and recycled textiles back into the value chain.



Credit: Alejo Reinoso

¹ Low-value textiles refers to both low-value and non-rewearable textile waste which are items that cannot be reused in their original form, enters end of use destinations such as downcycling (wipers, automotive industry) or incinerated, or have reached market saturation in the global second-hand textile trade.

“As fibre-to-fibre textile recycling commitments and policies increase, as well as the amount of textile waste collected, the infrastructure required to drive the move towards circular systems requires significant investment to scale. To make informed investment decisions, as well as assess the business case for monetisation through recycling, a deeper understanding of the characteristics of today's European post-consumer textiles landscape is needed. This project lays the knowledge foundation that will enable key players to set into motion.” - Katrin Ley, Managing Director of Fashion for Good

The Sorting for Circularity Europe Project was initiated to address this knowledge gap, exploring post-consumer textiles in depth, providing meaningful information on which to base investment decisions, policy developments and next steps towards circularity. Furthermore, the project aims to increase harmonisation between the sorting and recycling industry, stimulating a recycling market for unwanted textiles that can generate new revenue streams for sorters and unlock demand for recyclers and brands. The full report of the project can be read [here](#).

Conducting the analyses across Europe, in Belgium, Germany, the Netherlands, Poland, Spain, and the United Kingdom, the project provides the most comprehensive and representative snapshot of textile waste composition in Europe to date. The results point to promising opportunities for recapturing value while diverting textiles from downcycling and incineration. The results also inform brands of the best circular design practises to adopt, as well as textile collection agencies and organisations to build the necessary infrastructure and better educate and engage consumers on proper sorting and disposal practices.

LEAPING FORWARD THROUGH TECHNOLOGY

Using innovative Near Infrared (NIR) technology to determine garment composition, traditionally a task performed manually, the project analysed a total of 21 tonnes of post-consumer garments. On-the-ground examinations were performed over two time periods, autumn/winter 2021 and spring/summer 2022, to account for seasonal changes in the types of garments entering sorting facilities.

Cotton was found to be the dominant fibre (42%), followed by a large presence of material blends (32%), almost half of which consisted of polycottons (12%). Based on three characteristics, material composition, presence of disruptors, such as zippers and buttons, and colour, 21% of the

materials analysed are deemed suitable as feedstock for mechanical recycling, while 53% are suitable for chemical recycling. This presents a significant opportunity for circularity as currently only 2% of post consumer textiles are diverted to fibre-to-fibre recycling.

BUILDING A ROBUST SORTING AND RECYCLING INFRASTRUCTURE

In addition to the report, two further industry resources, developed by Circle Economy, have been made available; [Recycler's Database](#), a database mapping textile recycler's capabilities, illuminating crucial gaps between the sorting and recycling industry, and an open source [Sorters Handbook](#) to guide the sorting industry - encouraging and supporting further analyses.

Building off the project, two open digital platforms, [Reverse Resources](#) and [Refashion Recycle](#), to match textile waste from sorters with recyclers, have been identified as critical tools to further enable the connections needed to drive greater circularity in the years to come. Following an assessment of suitable digital platforms within and outside of the textile industry, Reverse Resources have 39 active recyclers and 32 active waste handlers/sorters on their platform, while Refashion Recycle have 103 recyclers and 66 sorters onboarded onto their platform. This represents a large portion of the European circularity industry.

PATH TOWARDS A CIRCULAR INDUSTRY

The amount of textile waste collected is likely to increase, due to growing consumption and disposal, and incoming legislation, such as the [Waste Framework Directive](#). Overall, a strong business case for sorting low value textiles is required in order to maintain and increase sorting capacity in Europe. To support this retention and development of sorting capacity, increased investments and policy changes play a key role.

Based on findings and knowledge gathered from the project, Fashion for Good and Circle Economy recommend the following actions in the report:

- **For all collectors, sorters, and recyclers -**
 - Use the [Sorters Handbook](#) and the [Sorting for Circularity Europe Report](#) as guidance to conduct further trials and continue to build an understanding of fibre composition, sorting and recycling processes.
 - Provide open-access to trials and data that can support and direct investment into necessary infrastructure.

- Update and utilise the [Recyclers Database](#) to build knowledge about mechanical and chemical recycling destinations.
- Funnel further investments into new sorting technologies needed to scale the amount of textiles deemed suitable as feedstock for mechanical and chemical recycling.
- Join digital platforms such as [Reverse Resources](#) and [Refashion Recycle](#) to unlock and connect supply with demand.
- **For brands and manufacturers** -
 - Further commit to adopting circular design practices and incorporating recycled fibres into product portfolios as mandated by the upcoming [Ecodesign for Sustainable Products Regulation](#) in the European Union.
- **For policy makers** - consider the **Sorting for Circularity Europe Report** and other relevant studies when developing toolkits, frameworks and legislation such as: the harmonised [Extended Producer Responsibility framework](#), the [Digital Product Passports](#) pathway in textiles, and the [Ecodesign for Sustainable Products Regulation](#).
- **For consumers** - take into account that purchase and disposal choices have an influence on the end of use of textiles. Consider extending the life of products through repairing, reselling and swapping.

CONSORTIUMS POWER TRANSFORMATION

Launched in early 2021 and initiated by Fashion for Good together with Circle Economy, the Sorting for Circularity Europe project brought together key brands and industry leaders across Europe.

The project brings together the largest industrial textile sorters in the European region; including the Boer Group, I:CO - part of SOEX Group, JMP Wilcox - part of Textile Recycling International, Modare-Cáritas, Wtórpol and TEXAID, placing key industry players firmly at the heart of the project.

Sorting for Circularity Europe is made possible thanks to catalytic funding from Laudes Foundation and is facilitated by Fashion for Good brand partners, adidas, BESTSELLER, Inditex and Zalando, with H&M Group as key project partners. Fashion for Good partners Arvind Limited, Birla Cellulose, Levi Strauss & Co., Otto Group and PVH Corp. participated as part of the wider working group.

Circle Economy, with support from TERRA, led the creation and implementation of the methodology. Refashion facilitated the introduction to

TERRA and created the Refashion textile materials library, for the implementation of the methodology. Matoha provided the NIR technology used to assess textile waste composition.

SORTING FOR CIRCULARITY

Sorting for Circularity aims to (re)capture textile waste, expedite the implementation of game changing technologies and drive circularity within the fashion value chain. The framework is based on insights from the Fashion for Good and Aii collaborative report “[Unlocking the Trillion Dollar Fashion Decarbonisation Opportunity](#)”, which charts a trajectory for the industry to meet its net-zero ambition by 2050, highlighting the potential and significant impact on carbon emissions in the industry through material efficiency, extended and re- use of waste. Created with scalability in mind, the project was first initiated in Europe, and has now expanded to include [Sorting for Circularity India](#).

ABOUT CIRCLE ECONOMY

Circle Economy is a global impact organisation with an international team of passionate experts based in Amsterdam, empowering businesses, cities and nations with practical and scalable solutions to put the circular economy into action.

Their vision is an economic system that ensures the planet and all people can thrive.

Since 2014, their Circle Textiles Programme works to enable the data, technology and infrastructure needed to valorise textile waste at end-of-use and increase apparel brands' capacity to adopt circular strategies and business models. Their mission is to connect a circular supply chain of producers (manufacturers, retailers and brands) and solution providers (collectors, sorters, recyclers, manufacturers, logistics etc.).

Circle Economy has deep expertise in the areas of textile-to-textile recycling, circular business models, design for cyclability, technology assessments and circular infrastructure developments.

ABOUT FASHION FOR GOOD

Fashion for Good is the global platform for innovation.

At its core is the Global and Asia Innovation Programme that supports disruptive innovators on their journey to scale, providing hands-on project management, access to funding and expertise, and collaborations with brands and manufacturers to accelerate supply chain implementation.

To activate individuals and industry alike, Fashion for Good houses the world's first interactive museum dedicated to sustainable fashion and innovation to inform and empower people from across the world and creates open-source resources to action change.

Fashion for Good's programmes are supported by founding partner Laudes Foundation, co-founder William McDonough and corporate partners adidas, BESTSELLER, C&A, CHANEL, Inditex, Kering, Levi Strauss & Co., Otto Group, Patagonia, PVH Corp., Reformation, Stella McCartney, Target and Zalando, and affiliate and regional partners Arvind Limited, Birla Cellulose, Norrøna, Pangaia, Teijin Frontier, Vivobarefoot, Welspun and W. L. Gore & Associates.

Website: www.fashionforgood.com

Twitter: [@FashionforGood](https://twitter.com/FashionforGood)

Facebook: [FashionForGoodGlobal](https://www.facebook.com/FashionForGoodGlobal)

Instagram: [@fashionforgood](https://www.instagram.com/fashionforgood)

Medium: [fashion-for-good](https://www.medium.com/fashion-for-good)

NOT FOR PUBLICATION

PRESS CONTACTS:

HEADQUARTERS

Fashion for Good

Earl Singh

Rokin 102

1021 NV, Amsterdam

The Netherlands

+31(0)6 48189374

press@fashionforgood.com

APAC

id8 Media Solutions

Neha Nair

Office No. 42/52A,

Municipal Industrial Estate,

KK Marg, Jacob Circle

Mahalaxmi, Mumbai, 400011, India

neha@id8mediasolutions.com

