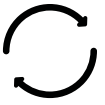




End of Use, Reuse & Recycling



END OF USE, REUSE & RECYCLING

Overview

When a product is discarded, there are different routes it can take. It could be donated to charity for re-use, downcycled into a lower value material (insulation, for example), recycled or upcycled into a new product or material of equal or superior value, biodegrade back into the earth, be incinerated, or get buried in a landfill.

Understanding that at current consumption rates we'll not be able to continue "business as usual", fashion sustainability initiatives are currently focusing much of their energy on creating a circular fashion economy, in which all products will either be infinitely recyclable or renewable and biodegradable, without negative harm to people and the planet. In May 2018, 94 companies had already signed the [2020 Circular Fashion System Commitment](#). As Eileen Fisher puts it, "we're working toward a world in which the clothes we wear today become tomorrow's raw materials."

While many exciting circular innovations and programs will likely reach scale in the next 5-10 years, for now circularity is not a reality. Less than 1 percent of materials used to produce clothing are recycled into new clothing, according to [A New Textiles Economy Report 2017](#), which includes recycling after use, as well as the recycling of factory off-cuts. Expert interviews and some reports suggest that the rate of recycling clothing after use could be below 0.1 percent.

The EPA estimates that the recycling rate for textiles in clothing and footwear in 2014 was 15.6 percent, with 84.4 percent either going to landfill (the vast majority) or into an incinerator. Overall, charities sell only 20 percent of the clothing donated to them at their retail outlets. Some of the bigger charities sell more than that—30 percent at Goodwill, 45 to 75 percent at the Salvation Army and 40 percent at Housing Works, to give a few examples.



WORKSHEET

Reuse, recycling, and proper disposal

Find circular opportunities

- Try to design products and packaging that are reusable and either infinitely recyclable or compostable. No waste should be created along a product's entire lifecycle.
- Aim to design products that not only do no harm, but benefit society.
- If it is not possible to design a circular product, find other ways to support the development of a circular economy. For example, you could choose to incorporate a single circular element into your product, or you could financially support circularity innovation through investment or charitable giving.

Label how consumers should recycle or dispose of products

The care label on your product should specify what customers should do with unwanted items. This may include donating, recycling, disassembling, throwing in the compost, or returning it to your company.

- You could make it easier for your customers by providing this information in other places as well, like at the point of purchase or on your website.

Take responsibility for your own waste

Create a Take Back Program

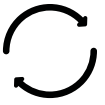
- Encourage your customers to bring back the products you sold them when they are no longer wanted. Some companies provide store credit, for example.
- Analyze what has been returned to measure the quality, longevity, and value of your products and improve them.
- Properly dispose of, reutilize, or recycle the products you take back.

Recycle, compost, or otherwise utilize your pre-consumer waste

- This includes things like fabric offcuts and deadstock.
- You should be working to minimize and completely eliminate pre-consumer waste.

EILEEN FISHER

“We’ve always believed in *design that stands the test of time*. In 2009, we started a take-back program, part of a circular system that preserves the value of our clothes at every stage. So when you’re done with your clothes, we take them back, in any condition, to be resold or renewed through techniques like overdyeing and mending. And the pieces we can’t use? We save every scrap, because they’re tomorrow’s raw materials. Damaged garments are re sewn into one-of-a-kind designs—just one of the solutions we’ve created to address the mounting problem of textile waste.”



TOOLS & RESOURCES

Examples

Theory

Through their Theory for Good program, Theory collects gently used Theory clothing on behalf of Year-Up, a non-profit devoted to empowering young adults. Customers who donate clothing can exchange it for new items at a reduced price.

Nudie Jeans

Through their ReUse program, Nudie takes back their jeans through a trade-in program (giving customers 20 percent off a new pair when they hand in an old one), refurbishes them, and resells them both online and at Nudie brick-and-mortar stores. Nudie Jeans has also made chic rugs and campstools out of recycled denim.

Hanky Panky

First, Hanky Panky encourages customers to donate gently worn bras to a local homeless or women's shelter or to national organization such as Support the Girls. For items that are not suitable for donation (for hygiene purposes or because they're simply worn out), they created the Lingericycle™ initiative. Hanky Panky sends customers free Lingericycle mailers upon request, which customers can send back with their old bras and panties (from any brand). Items are finely shredded. Metal items such as underwires and hooks are separated out by magnets and sent to a metal recycler while fabric components are ultimately converted into carpet padding.

The RealReal x Stella McCartney

The RealReal and Stella McCartney are working in partnership to make a positive impact and advance their shared values: sustainability and the promotion of the circular economy in luxury fashion. For every Stella McCartney item you consign on the RealReal, Stella McCartney will give you \$100 credit at her store.

Patagonia Worn Wear

In addition to sharing extensive information on how to repair your Patagonia clothes and offering repair services, Patagonia takes all of their products back for recycling or

repurposing. Anything that can be refurbished is re-sold through their Worn Wear program, and customers are given store credit for turning in these pieces. Non-resellable items may be turned into brand new fabric or repurposed in other ways.

Madewell

In collaboration with the Blue Jeans Go Green™ denim recycling program, Madewell asks its customers to bring them pre-loved jeans, and in return gives customers \$20 towards new ones.

NIKE

Nike's Reuse-A-Shoe program recycles athletic shoes at the end of their life, giving them a new life through Nike Grind. Nike Grind materials are created from recycled athletic footwear and surplus manufacturing scraps to make performance products, ranging from new footwear and apparel to sports surfaces. Today, Nike Grind materials are used in 71 percent of Nike footwear and apparel products, in everything from yarns and trims, to some of their premium jerseys and shoes. Premium sports surfaces include running tracks, courts, turf fields, gym floors, carpet padding and playgrounds.



TOOLS & RESOURCES

Textile collection & recycling organizations

Collection, sorting & repair resources:

[American Textile Recycling Service \(ATRS\)](#)

ATRS is a US-based donation bin operator that collects, sorts, donates and resells gently used, out of season, unwanted clothing, shoes, toys and household. ATRS ensures almost everything is used, nothing is wasted. – About 45 percent is usable “as is” in the growing second-hand clothing market – 20 percent is used for upholstery and automotive stuffing – 30 percent is used for industry wiping rags – ATRS gives away 3 percent for disaster relief. This equates to several trailer loads of blankets, warm wear, suits and household items every month.

[Bank and Vogue](#)

Bank and Vogue works to provide innovative and relevant solutions for the crisis of stuff. They work with suppliers across the US and Canada, from thrift stores and manufacturers to well-known retailers and have a distribution network that spans the globe. Bank & Vogue buys credential clothing (original, unsorted, unopened clothing donations) from charities and for-profit collectors across North America and then re-purposes it through multiple channels.

[Blue Jeans Go Green Denim Recycling Program](#)

Drop off your or mail used denim to Blue Jeans Go Green and they will turn it into UltraTouch™ Denim Insulation made from 80 percent post-consumer recycled denim. They've been at it for over a decade and have recycled over 2 million pieces of denim. Brand collaborators include Madewell, Guess, and Saks Fifth Avenue.

[I:CO](#)

I:CO is an international circular solutions provider for the collection, certified sorting, reuse and recycling of discarded clothing and shoes. They put great emphasis on continuously supporting innovative, new recycling technologies with the aim of closing the loop of production cycles. The I:CO take-back system makes it possible to collect used clothing and shoes at a retailer's point of sale and give them a new life through reuse or recycling. Headquartered in Germany, I:CO has additional branches in the USA, Japan, China and France. Partners include H&M, Adidas, American Eagle Outfitters, The North Face, and more.

[Fashion Positive Material Reutilization Tool: Find a Textile Collections and Processing Provider](#)

Learn about textile or garment collections and material processing, and find a provider in your area.



TOOLS & RESOURCES

Textile collection & recycling organizations

Collection, sorting & repair resources:

[Materials for the Arts](#)

Materials for the Arts is New York's premiere reuse center, collecting unneeded items from businesses and individuals, and making these donations available for free to its recipients: nonprofit organizations with arts programming, government agencies, and public schools. They collect items like art supplies, art books, beads and jewelry, fabric (large pieces), trim and sewing notions, office supplies, paper, and office supplies. They do not collect clothing or fabric scraps. The MFTA warehouse is operated by the New York City Department of Cultural Affairs with additional support from the City's Departments of Sanitation and of Education.

[refashionNYC](#)

refashionNYC is NYC's official clothing reuse program in partnership with NYC Department of Sanitation and Housing Works to make textile donations as easy as possible, through a convenient in-building service. You can enroll your building to receive a refashionNYC collection bin. Tax receipts are available on the bin. Their partnership with Housing Works provides this convenient collection while fighting the dual crises of homelessness and AIDS. They'll visit your building to discuss how many bins you'd like, what sizes are best and where they should be placed. Buildings simply call or email for a free pick up when the bin is full. Eligible buildings include apartment buildings with 10 or more units, office buildings, commercial businesses, schools and institutions. Accepted items include clothing (from women, men & children), shoes, purses, gloves, scarves, hats, belts, towels, curtains, bedding and linens, clean rags and torn clothing. You can also read about [GrowNYC Zero Waste Programs: Greenmarket Clothing Collection](#).

[Revolve Waste](#)

Focused on taking circular textiles to the next level, REvolve began in 2013 and re-launched in The Netherlands in 2019. They aim to address the technical, data-driven, and systemic components of circular textiles. Their work builds and develops the connections of a new, circular industry. Collaborations are focused on cotton and polyester resources and address the biggest short-term hurdles to circular textiles. Individual projects are tailored to each client.

[Secondary Materials and Recycled Textiles \(SMART\) Association](#)

SMART is a global organization of companies involved in the reuse and recycling of textiles and related secondary materials. As an international trade association working to promote the for-profit textile recycling industry SMART serves the common interests of its members through advocacy, networking, and education.



TOOLS & RESOURCES

Textile collection & recycling organizations

Collection, sorting & repair resources:

TEXAID

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The Renewal Workshop

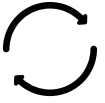
Based in Oregon, the Renewal Workshop takes discarded apparel and textiles and turns them into Renewed Apparel, upcycled materials or recycling feedstock. Data is collected on everything that flows through the system and is given back to their brand partners to help them improve the production and design of future products. It is a zero waste system that recovers the full value out of what has already been created as a way of serving customers, partners and planet. Partners include Coyuchi, Prana, Nau, and Outerknown, among others.

Wearable Collections

Wearable Collections is a NYC based company focused on keeping clothing, textiles and shoes out of landfills while generating funds for charities. They accept all used clean clothing including shoes, sneakers and hats in addition to household items such as linens, towels, handbags and belts.

Yerdle Recommerce

Yerdle makes it easy for brands to buy back and resell used items by providing technology and logistics to develop white-label re-sale programs. Patagonia, Eileen Fisher and REI partnered with Yerdle to launch and operate their recommerce programs. Find out more [here](#).



TOOLS & RESOURCES

Textile collection & recycling organizations

Textile scrap recycling:

FABSCRAP

FABSCRAP provides convenient pickup and recycling of textiles for businesses in New York City. Any business creating textile waste can recycle fabric scraps, cuttings, headers, mock-ups, samples, overstock, bolts, production remnants, and any other unwanted excess fabric. FABSCRAP provides reusable recycling bags in two colors (black for proprietary materials and brown for everything else). Once filled bags are picked up from your business, FABSCRAP processes, sorts, and consolidates scrap to prepare materials for recycling and reuse. They work with brands like Eileen Fisher, Oscar de la Renta, Marc Jacobs, Loomstate, Tracy Reese, and more.

Companies producing new
textiles from textile waste:

[Re:Newcell](#)

[TEIJIN Recycled Polyester](#)

[The Infinited Fiber Company](#)

[ECONYL](#)

[Pure Waste Textiles](#)

[Recover](#)

[SaXcell](#)

[Worn Again](#)



TOOLS & RESOURCES

Suggested reading

Articles:

[“Fast Fashion Is Creating an Environmental Crisis”](#)

Alden Wicker, Newsweek, September, 2016

[“The hidden trade in our second-hand clothes given to charity”](#)

Andrew Brooks, The Guardian, February, 2015

[“Here’s where your donated clothing really ends up: Only 25% of clothing collected for thrift shops actually sells in the stores. What happens to the rest of it?”](#)

Paul Jay, CBC News, May, 2018

Reports & studies:

[EPA Textiles Specific Data](#)

The US Environmental Protection Agency measures the generation, recycling, combustion with energy recovery, and landfilling of textile material in municipal solid waste.

[The impact of second-hand clothing trade on developing countries](#)

Sally Baden and Catherine Barber, Oxfam, September 2005

[Developments in global markets for used textiles and implications for reuse and recycling](#)

Hanna Ljungkvist, David Watson, Maria Elander, A Mistra Future Fashion Report, 2018

[Mistra Future Fashion Reports](#)

The Mistra Future Fashion program is a cross-disciplinary research program that holds uniquely a system perspective on the fashion industry. Its vision is to close the loop in fashion and clothing – enabling a systemic change in the Swedish fashion industry, leading to a sustainable development of the industry and society. They have produced many reports around the topic of textile recycling, which can be found [here](#).

[A New Textiles Economy: Redesigning fashion’s future](#)

The Ellen MacArthur Foundation & Circular Fibres Initiative, 2017