



SOURCING TEXTILE WASTE

CREATED BY REDRESS

WHAT IS IT?

Textile waste is the textile by-product of the manufacturing of garments, fabrics, yarns or fibres that are deemed unusable for its original purpose by the owner.

Textile waste can include fashion and textile industry waste, created during fibre, textile and clothing production, and consumer waste, created during consumer use and disposal.

Pre-consumer textile waste is made up of manufacturing waste that has not reached the consumer.



Textile swatches are leftover textile sample swatches from the production process.



Cut-and-sew waste is textile scraps generated during garment manufacturing. It is often considered waste and is discarded due to its uneven and small formats.



End-of-rolls are factory surplus textiles that have been left over from garment manufacturing.



Sampling yardage is factory surplus waste leftover from textile sample manufacturing.



Damaged textiles are unused textiles that have been damaged for example with colour or print defects, rendering them unusable.



Clothing samples are part-finished or finished clothing samples from the design and production of clothing.



Unsold clothing waste is clothing (finished or unfinished) that has not been sold.

Post-consumer textile waste is waste collected after the consumer has disposed of it.



Secondhand clothing waste is any clothing or fashion accessories that have been owned and then discarded by consumers (both used and unused).



Secondhand textile waste is any finished non-clothing textiles (such as curtains, bedding etc) that have been owned and then discarded by consumers (both used and unused).

Image credit: Luke Casey



Textile waste at a recycling station in Hong Kong.

WHY DO IT?

Producing textiles is an environmentally damaging process. Textiles consume vast quantities of natural resources, like water, oil and land, they use toxic chemicals and generate large amounts of carbon dioxide. But it's not just what we put into textile and fashion production – it is also what comes out during the production and consumer use processes.

Unfortunately, millions of tonnes of textiles are discarded every year.

- In the European Union, 9.4 billion tonnes of textile waste are either landfilled or incinerated.¹
- In America, it is estimated that 12.3 million tonnes are either landfilled or incinerated.²
- In China the total annual production of pre and post-consumer textile waste is estimated to be over 26 million tonnes.³

Not only does this textile waste pollute our environment and clog landfills around the world, but the precious resources that went into making these textiles are wasted. The good news is that by reusing textile waste, designers can divert textile waste away from landfill and prolong the lifecycle of the textile material.

The exciting opportunity is that textiles are almost 100 percent recyclable and reusable⁴, and they have the potential to meet our needs several times over. This means that we should creatively and environmentally strive to never discard or dump textiles away – every again!

HOW DO I DO IT?

Sourcing textile waste can seem challenging when compared to picking up a new fabric from a supplier, a trade fair or a store. However, sourcing textile waste is a fun and inspiring process that will shape your final design and stretch your creativity. Don't be afraid to look at your design process in a new light, because when using the sustainable design techniques of up-cycling and reconstruction, sourcing your textile waste will often be the starting point of your entire design process.

When sourcing textile waste, look for high quality textile waste to ensure that your new design will be durable and last long in its new wardrobe. Don't be afraid of a hole or rip. Instead, work around minor defects or let defects become a design feature and remember that mistakes can be beautiful too! If you are looking for a particular fabric but don't find the colour you want it in, you can reprint or re-dye it to your preferred taste.

Last but not least, don't forget to clean the textile waste to make sure that the final product is fresh and new in the eyes and noses of the consumer.



Image credit: Johanna Ho

Johanna Ho uses her own clothing samples that have not been ordered by customers to reconstruct new garments.

1 FOLLOW YOUR OWN TEXTILE WASTE STREAM

This is the first and most important step to finding your preferred types of textile waste. As Orsola de Castro has taught us, if you follow your own waste stream you will find what you need. Ask yourself; Where is textile waste generated in my supply chain? How can I reuse this? How can I get a hold of more? Which other bigger brands use my preferred type of textiles and will they have textile waste for me?



Image credit: Ada Zanditon

UK designer, Ada Zanditon up-cycles scraps from her own production line to give waste a new lease of life into her collections of clothing and accessories.



Hong Kong designer and Redress Design Award Hong Kong 2011 finalist, Yuri Man used textiles leftover from her own production process to create this up-cycled outfit.

2 SHARING YOUR VALUES

Contact factories and textile mills as they may have an endless supply of surplus textiles. Target factories and textile mills that produce the specific type of material that you are looking for. If you get in contact with the right one at the right time, this could be a goldmine of high-end textile waste, sold at a fraction of the price due to possible irregular shapes, sizes and quantities.



Chinese designer and Redress Design Award China 2012 finalist, Lin Jia Xin sourced production leftovers from a factory in China to create this up-cycled outfit.



Estonian brand, Reet Aus work with factories in Bangladesh to demonstrate the possibility of up-cycling large scale pre-consumer textile waste by establishing the brand Trash to Trend.

Image credit: Reet Aus



Image credit: Absurd Laboratory

Hong Kong designer and Redress Design Award 2011 finalist, Eric Wong created this SS'14 outfit by up-cycling surplus factory textiles. He works closely with a few factories to ensure a steady supply of textile waste.

3 VISIT TRADE FAIRS AND SHOWROOMS

Visit trade fairs and showrooms to get a better understanding of what types of textiles are available and how to get hold of them. Speak to the exhibitors directly to see what they do with their textile waste. Start up conversations – you may get more than you can handle!

Today there is also an increasing availability of recycled textiles, which are made by repurposing pre-consumer and post consumer textile waste.



Image credit: NICE

The Fabric Source, set up by NICE, is a sustainable fabric library in Copenhagen with over 1,000 sustainable fabrics from over 30 countries. Users have the possibility to place orders individually or with other brands to gain better minimum volumes and prices.



Image credit: C.L.A.S.S.

C.L.A.S.S. (www.classecohub.org) is a unique, multi-platform worldwide network that showcases sustainable textiles and materials. C.L.A.S.S. also have eco-libraries of fabrics, yarns, production and finishing processes and their samples showrooms are located in Milan, London, Helsinki and Madrid.

4 CHECK YOUR TEXTILE SHOP

Depending on where you live, there are textile shops and markets selling end-of-roll textiles and samples. Regardless of where you live, contact textile shops and ask them if they have any samples available.



Sham Shui Po in Hong Kong is an incredible source for end-of-rolls, fabric swatches and textile samples. It is a regular sourcing ground for Hong Kong and overseas designers, also coupled its proximity to China's plentiful garment factories.

5 GO ONLINE

Research, research, research! Dig online to discover where textile waste is going, who is selling it and who is buying it. Many companies and consumers sell samples, stock clothing, textiles and secondhand clothing online. Check www.ebay.com and www.taobao.com in your country.

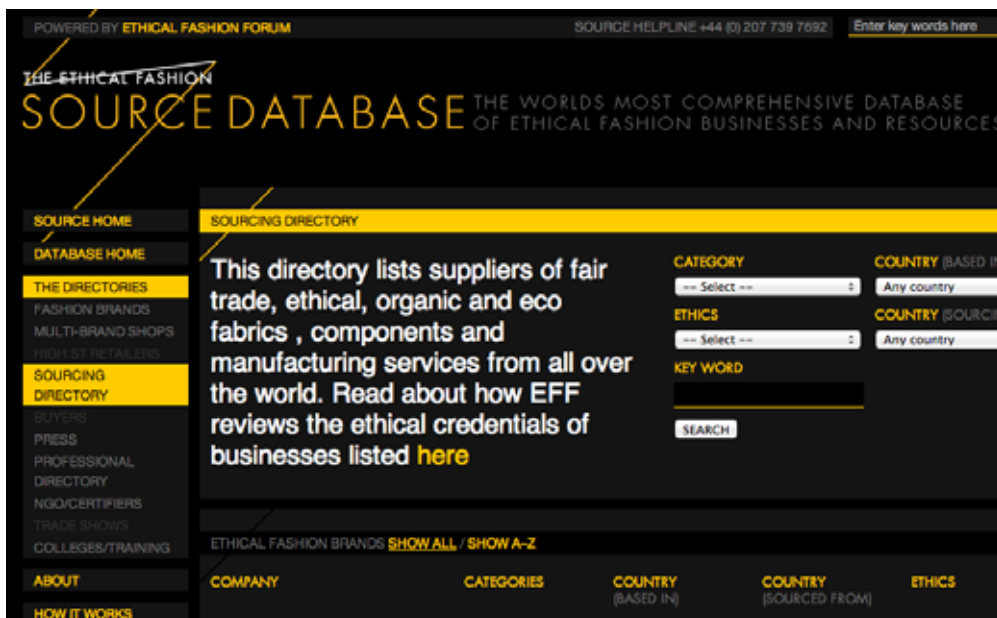
Check out www.futurefabricsvirtualexpo.com or www.classecohub.org to find more information about sourcing sustainable textiles and www.ethicalfashionforum.com for tips and tricks to sourcing sustainably.



Chinese designer and Redress Design Award China 2012 winner, Gong Jia Qi sourced overstocked clothing online to create this reconstructed outfit.



Future Fabrics Virtual Expo (www.futurefabricsvirtualexpo.com) is an online research and sourcing platform with a library of sustainable textiles and materials, where users can discover and directly contact mills from around the world.



Ethical Fashion Forum (www.ethicalfashionforum.com) has a sourcing directory listing suppliers of various types of sustainable textiles from around the world.

6 REACH OUT TO YOUR NETWORK

Reach out to other designers and ask for their waste. Beautiful waste can be found at your friend's studio or even on the floor of your university design studio. Look around you and you might be surprised at what you can find.



Chinese designer and Redress Design Award China 2012 finalist, Herlina Wiyaya used textile waste she found on her university's studio floor and at a local design studio to create this up-cycled outfit.



Image credit: Trash-Couture

Danish brand, Trash-Couture up-cycles leftover textiles from large couture houses in their collections.



Image credit: Eva Zingoni

Paris based designer, Eva Zingoni makes limited-edition designs from surplus materials sourced from Parisian fashion houses.

7 RAID WARDROBES

Look in your own, your friends' and your family's wardrobes to see what is hanging around and not being used anymore. This textile supply may be varied, but on the up-side it may not cost you a dime!



Johanna Ho sources luxury secondhand clothing from her celebrity friends' closets and reconstructs them into new garments.



Taiwanese designer and Redress Design Award 2013 finalist, Tsung-Chin Chiang sourced secondhand garments from her friends and family to create this reconstructed outfit.

8 GO TO SECONDHAND STORES AND MARKETS

Go to secondhand stores and markets to find an endless supply of textiles. Be specific on what type and quality of textiles you are looking for. If you are looking for high quality and luxury textiles, then go to vintage and consignment stores. If you are looking for large quantities of secondhand jeans, then visit a charity shop or flea market.



Chinese designer and Redress People's Award China 2012 winner, Chen Qin Zi sourced secondhand clothing from a secondhand market in Shanghai to create this reconstructed dress.



Image credit: Momo Wang

Chinese designer, Momo Wang's The Third Hand Collection was made by reconstructing secondhand clothing, sourced from markets in her hometown of Jinzhou.



French designer and Redress Design Award 2013 finalist, Clémentine Sandner sourced clothes from secondhand shops in Paris to create this reconstructed dress.

9 SHARING YOUR VALUES

Textile recyclers get an endless supply of textile waste in all shapes and sizes. Often high quality clothes are resold in charity shops and lower quality goods are sold to developing countries. Find out where the waste you want goes to and ask around at ways that you may access some of it. Contact the recycling companies to see if they are willing to sell you any of the clothing and textiles.



Image credit: Reet Aus

UK brand, Goodone sources a lot of their textiles from textile recycling banks in the UK.



Hong Kong designer and Redress Design Award Hong Kong Most Promising Student Award 2012 winner, Kelvin Wan sourced secondhand clothes and bed linen from Friends of the Earth Hong Kong's used clothing bins to create this reconstructed dress.



Image credit: Model/Bonnie Chen, Styling/Denise Ho, Photography/Raul Docasar

UK designer and Redress Design Award 2013 finalist, Catherine Hudson sourced secondhand clothes and blankets from a used clothes recycling warehouse in Hong Kong to create this reconstructed dress, which she made during The Redress Forum Designer Challenge with Miele.

10 CONTACT BRANDS

Get in touch with brands to see what they are doing with their textile waste. They may have end-of-roll textiles and samples that are too small for them to mass produce, which they may be interested in passing on. Target the brands that are in your area and that have textiles that you like using. Be realistic and think of brands that might be open to selling or giving away their textile waste. Brands that have textiles with iconic patterns or logos will not usually be interested in this type of reuse by a third party.



Image credit: Tesco

UK brand, From Somewhere previously created an up-cycled collection for British chain Tesco using damaged stock, end-of-rolls and pre-consumer textile waste from Tesco's own supply chain.

Hong Kong designer and Redress Design Award Hong Kong Most Promising Student Award 2012 winner, Kelvin Wan used Esprit's surplus factory waste to create this up-cycled outfit.

11 SET UP A CLOTHING COLLECTION

'Take back' programs are becoming the hot topic in sustainable fashion. High-street brands, such as H&M, M&S, Esprit and Uniqlo, all have take back containers in-store around the world to encourage their customers to return used clothes and textiles. Why not organise your own take back programme? Collect from your customers or organise a clothing collection in your community and work with what you get. Many people have overflowing wardrobes and they have no idea what to do with their unwanted clothes. Remember to let your potential clothes' donors know what you will do with their donated clothes and textiles.



Image credit: TRAIID

UK based TRAIID collects used clothing from the public in their textile recycling banks around London. Selected secondhand clothes are then redesigned and sold under their TRAIIDremade label.



Image credit: Patagonia

US brand, Patagonia have taken back worn out Patagonia clothing from consumers for recycling since 2005. The collected clothing is then reused as-is, recycled into new fabrics or made into a 'new' product.

12 THINK OUTSIDE THE BOX

Yes we know this is somewhat of a cliché — but it works. Don't be restrained by common approaches. Let the sourcing journey inspire your designs and collections. Think of materials and sources that you might not have considered before and this way you will create a unique collection! What do hotels do with old curtains? What do airlines do with old uniforms? What do showrooms do with old display furnishings? What do textile shops do with their samples if they close down? Only your imagination is the limit...



Image credit: Victor Fraile @ Studio East

Hong Kong designer and Redress Design Award 2013 finalist, Alex Law used a secondhand catwalk carpet, sourced from his university's catwalk show, to create this up-cycled outfit.



Image credit: From Somewhere

UK brand, From Somewhere up-cycled surplus material from Speedo's 'LZR Racer' swimsuit to create wearable and fashion-forward clothes.



Image credit: Worn Again



Image credit: Re;code

UK brand, Worn Again worked with Christopher Raeburn to up-cycle retired Virgin hot air balloons into parkas.

Korean brand, Re;code works with independent designers, charities and companies to redesign and find alternative uses for over-produced stock materials.

13 FINALLY...

When you find your ideal source and type of textile waste supplier, try to build lasting partnerships with them so that you have an endless supply of waste materials. This way, you will know where your waste is coming from, whether a textile mill or your best friend, will have a stable recycling route for their waste. Finding a stable source of textile waste supply will make sourcing textile waste easier every time...

CASE STUDY

ANTIFORM

Antiform is a forward-thinking UK based fashion company with an irregular twist. Antiform aims to push the boundaries of ethical, and sustainable design by using reclaimed materials that are based on combining fashion-forward shapes with heritage craft. The brand was established by Lizzie Harrison in 2007 and is run by an experienced team of local designers, researchers and communicators. All of their materials and production workmanship is sourced locally to their studio boutique in Leeds, UK.



Image credit: Antiform

Why is sustainable design important to you? How did you get into it?

I have always had an interest in sustainability in all aspects of my life. When I started to train as a fashion designer, I had a lot of questions about where materials came from and what happened to any waste. These constant enquiries have stayed with me and as I have developed as a fashion designer and so I continue to look for opportunities to create fashion that not only sits with my own ethics but also challenges aspects of the industry, which I feel needs to change.

Where/ how do you source your textile waste?

When I started my brand, working with textile waste seemed an obvious starting point because using waste revalues waste materials, which have been cast aside and are readily available in the UK, and it also starts to open a conversation with customers about the value of these 'wasted' textiles. I started sourcing waste materials eight years ago. At the beginning I spent a lot of time knocking on doors and talking to people who dealt with textile waste. After years of work we have built a strong and diverse network of suppliers, including businesses in garment manufacturing, vintage trade, rag trade and other related industries. We have built our network up locally so new suppliers now approach us with their waste streams.



Image credit: Antiform

What is important to think about when sourcing textile waste?

It is incredible important to think about quality and volume when you are sourcing waste materials. We always need to maintain a high quality in the fabric we source to ensure that the product will last well in the wardrobe. We also need to be very confident about the volumes of waste we buy, because buying is often a 'now or never' buying situation, so we have to be good at deciding how much of a certain textile we will use otherwise we have too much fabric in our studio. The materials we source then dictate our design direction for the collection.

What do you find most challenging about sourcing textile waste? How have you overcome these difficulties in the past?

I think the most challenging aspect is to make quick and considered decisions about what textile waste to buy. We also quite often completely run out of a certain fabric or material and we have to find replacements. The way we have overcome this is by trying to position every run that we make as a limited edition, which means that different buyers will get different stock.

What do you find most inspiring about sourcing textile waste?

What I find the most inspiring is the vast range of materials we uncover. This inspires our design work and is an integral part of our design strategy. I also find it really rewarding when we manage to use up quantities of a waste material that is hard to work with and that through our design we manage to make a new product using it.

Which is your favorite design made from textile waste?

One afternoon when visiting a textile mill, I was offered some cashmere swatch samples from the technician who was about to put them in the bin. These swatches inspired the development of our colourblock scarf, which continues to sell well.

What is your best resource?

My best resource is talking to the people who actually work with textile waste because gaining their support is absolutely key to uncovering materials that we can reuse.

How has your source of waste inspired your designs?

Our source of waste is critical to our design process and directs the resulting range because we design from the waste material to the garment. The different waste materials that we source are then crafted together into a collection, which sit well together, so the original waste sourcing is critical in our creativity.

What is your top tip to sourcing textile waste?

My top tip is to look around close to home. Do not start with an exact idea of what you might find but be open to sourcing something unexpected.

CASE STUDY

YURI, MAN YUK YEE

Yuri, Man Yuk Yee is a talented Hong Kong designer, who is well known to Redress. She proudly revealed her sustainable fashion design talents at our inaugural Redress Design Award (formerly the EcoChic Design Award) Hong Kong in 2011 and her career has been on an upward trajectory ever since. Later, she was awarded an influential mentorship with our long-standing competition judge, Orsola de Castro, who singled her out as a Hong Kong one-to-watch. Yuri's own sustainable brand, called Yuri Craft, pays homage to Yuri's acute eye for design and sustainability.



Image credit: Yuri Man

Why is sustainable design important to you? How did you get into it?

I am continuously inspired by my mother's attitude. She loves nature and knows so much about nature because she lived in an era without rampant technology and without a concrete jungle around her. She always tells me how beautiful Mother Nature is. Coupled with this, she worked for a knitwear and embroidery company herself and so she has excellent craft skills and experience in the fashion industry. These factors influenced me to create my own sustainable brand.

Where/ how do you source your textile waste?

I source textile waste from secondhand stores and I ask around at various companies for their textile waste.

What is important to think about when sourcing textile waste?

It's important to have a clear idea of what you want your collection to be before sourcing. For example, know what your theme, silhouette, colour and what your ideal fabric type is before starting to source. This will focus your sourcing efforts better. Also, it is useful to know your material's fibre composition so that you can inform your customer about how to wash, care and dispose of your garment in the most sustainable way.



**What do you find most challenging about sourcing textile waste?
How have you overcome these difficulties in the past?**

It can be challenging finding good quality textile waste and sometimes you may not find the ideal fabrics to form your collection. So, I make my designs more basic and user-friendly and with a greater focus on good workmanship in order to make the lifecycle of my designs longer.

What do you find most inspiring about sourcing textile waste?

I love it when I get new inspirations to create my collections from finding unexpected fabrics and secondhand clothes.

Which is your favorite design made from textile waste?

I love this reconstructed outfit's design concept. For the top, I experimented with reconstructing discarded lingerie – some of the bras are visible – and I used even the smallest pieces of scraps to create the top. The results were surprisingly appealing. I showed this outfit at Redress Design Award (formerly the EcoChic Design Award) Hong Kong 2011 Alumni Fashion Show.

What is your best resource?

My best resource is 'Mei Chi', a Hong Kong shop that sells secondhand and vintage clothes and clothing samples. There I can find many interesting details and prints. I learn about sourcing sustainable textiles through different organisations, such as Redress. I also learn a lot from my merchandiser friends.

How has your source of waste inspired your designs?

Usually, I would seldom use floral patterns or colourful textiles as my raw materials. However, because of the limitations of sourcing textile waste, I have learned to challenge myself to use different types of fabrics in my designs. And so, finally, I discovered that it is very interesting to use floral patterns and colourful textiles!

What is your top tip to sourcing textile waste?

Be patient when asking for textile waste from companies through email or phone.

LEARN MORE

WATCH THIS...

Redress Design Award Sourcing Tutorial

YouTube youtu.be/DTfBOfFYq80

Youku v.youku.com/v_show/id_XNTQ3MDgzNDk2.html

READ THIS...

A Practical Guide to Sustainable Fashion by Alison Gwilt

Cradle To Cradle: Remaking The Way We Make Things by Michael Braungart

Recycling in Textiles edited by Y Wang

Reducing Waste by Re-using Textiles by Rachel Gray, WRAP 2012

Sustainable Fashion and Textiles: Design Journeys by Kate Fletcher

BE INSPIRED BY...

Antiform | www.antiformonline.co.uk

c.l.a.s.s. | www.classecohub.org

Common Objective | www.commonobjective.co

FABSCRAP | www.fabscrap.org

Future Fabrics Virtual Expo | www.futurefabricsvirtualexpo.com

INNATEX | www.innatex.muveo.de

Interstoff Asia Essential | www.messefrankfurt.com.hk

Intertextile Shanghai Apparel Fabric | www.messefrankfurt.com.hk

Material ConneXion | www.materialconnexion.com

Munich Fabric Start | www.munichfabricstart.com

Queen of Raw | www.queenofraw.com

The Sustainable Angle | www.thesustainableangle.org

TRAID | www.traid.org.uk

Texworld | www.texworld-fr.messefrankfurt.com

LEARN THE LANGUAGE...

Clothing samples are samples from the design and production of clothing.

Cut-and-sew waste is textile scraps from garment manufacturing.

Damaged textiles are unfinished textile products that have been damaged, for example colour or print defects.

End-of-rolls are factory surplus textiles that have been leftover from garment manufacturing.

Post-consumer waste is waste collected after the consumer has disposed of it.

Pre-consumer waste is manufacturing waste that has not reach the consumer.

Sampling yardages are factory surplus sample textiles that have been leftover from sample manufacturing.

Secondhand is a product that is acquired after it has been used by someone else and is not new.

Secondhand clothing is clothing or fashion accessories that have been used and discarded by consumers.

Secondhand textiles are any textiles that have been used and discarded by consumers, which are not clothing or fashion accessories.

Textile swatches are leftover textile sample swatches.

Textile waste is a material that is deemed unusable for its original purpose by the owner.

Unsold clothing waste is clothing waste that has not yet been used.

FOOTNOTES

¹ LIFE ECAP (2015), European Sustainable Clothing Action Plan, Available at: ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5307&docType=pdf

² U.S. EPA (2016), Advancing Sustainable Materials Management: 2014 Fact Sheet, Available at: www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf

³ China National Garment Association (2016), www.cnga.org.cn/news/View.asp?NewsID=51452

⁴ Secondary Materials and Recycled Textiles Association (n.d.), Media Kit, www.smartasn.org/about/SMART_PressKitOnline.pdf