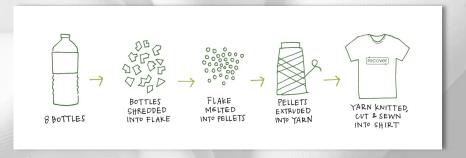
# Innovations in Fabrics

Cotton, silk, wool and other natural fibers may seem like a fine material for clothing at first blush, but the surge in clothing consumption has greatly taxed these limited resources. Also, many of these require a great deal of water and chemicals to process into wearable goods. For example, cotton requires "20,000 liters of water to produce just one kilogram of cotton, enough to make a single t-shirt." (Forbes) Synthetic fabrics come with their own drawbacks, such as plastic microfibers that enter our water supplies with every wash. New innovations seek to minimize these conventional materials and find better, more sustainable alternatives.

## **Plastic Fabrics**

One promising way to reduce waste while producing new clothing is to make it out of discarded plastic. "While they are still man-made materials, the resources needed to create them are sourced from plastic that already exists in the world, so it's not produced in the first instance for clothing." (Good) Recycling plastic in this way is an exciting venture as plastic cannot biodegrade. In other words, all the plastic we have ever produced is still around today, and it isn't going away any time soon. (Good) Sourcing debris in oceans for practical use has the dual purpose of cleaning polluted waters and producing a marketable product.



### **Recycled Textiles**

While recycling old clothing in any number of ways is nothing new, Recover is bringing a fresh take to this time-honored method of reducing textile waste. Recover boasts the key to a closed-loop, sustainable fashion industry: "Textiles made from Recover Fiber can flow through the recycling process for many life-cycles... [creating] long-lasting, high-value products in each successive generation." (Recover Tex) This is accomplished by providing collection bins for unwanted clothes which are then collected, sorted, and shredded into Recover Fiber. New garments and home goods are created with these materials, and when they are worn-out they can be returned to the Recover recycling process, closing the loop.



## **Pineapple Fibre**

If clothing produced out of tossed plastic and worn-out garments seems outlandish, Piñatex may appear to be fiction at first. This is a fruit-based vegan leather made of the inedible portions of a pineapple, such as the leaves. (Forbes) The leaves are a byproduct of existing agriculture, so no additional environmental resources are needed to produce it. (Piñatex) 1000 brands have used Piñatex so far, and their line is increasing to include more versatile and fun materials, from satin to metallic finishes.

#### Conclusion

Ultimately, it is important to remember that increased consumption is not the solution to eco-related issues. Instead of focusing on buying new, green clothing, consider better maintenance practices for the items you own to prolong their usefulness or buying from the myriad secondhand stores in your area. Appreciating and extending the life of clothing that has already been produced is most important, but hopefully these methods can help future generations produce new, needed clothing in a more sustainable fashion.

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#### **Work Cited**

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