

SUSTAINABLE ECO-COTTON RECYCLING TEXTILE WASTE MADE BY THE *NEW DENIM PROJECT* IN GUATEMALA

The Iris Textiles company based in Guatemala City (Guatemala), has created the [New Denim Project](#) manufacturing 100% sustainable eco-cotton yarn, fabrics, garments and accessories.

The New Denim Project production systems works under the design principle of upcycling. The process is restorative by design, beginning with collecting, sorting and separating post-industrial textile waste, mainly discarded cotton fibre and fabric scraps from the Guatemala's denim mills. They grind and shred this leftover fabric back into fibre, and then use the material once again, to spin and develop regenerated cotton yarns. Those new cotton yarns are then used to weave and upcycle into curated woven fabrics collection. The textiles are made of 100% natural fibres, free from synthetics, chemicals and dyes.

Iris Textile is a family-owned company created in 1956 in Guatemala, a country where the textile industry represents an important sector of the economy. Guatemalan textiles are exported to various parts of the world. In this context, the New Denim Project was launched in 2014 to help build sustainable production processes in the fashion industry in order to reduce the large negative impacts it generates in the environment all around the world.

[The New Denim Project website presents data demonstrating the great negative impact of the textile industry in the world:](#) the textile industry accounts for 10% of global carbon emissions and remains the second largest industrial polluter, second only to oil; less than 1% of material used to produce clothing is recycled into new clothing; the textile industry is one of the top 3 water wasting industries, and the second largest polluter of freshwater resources on the planet; a quarter of the chemicals produced in the world are used in textiles and 20% of industrial water pollution globally is attributable to the dyeing and treatment of textiles; it has been estimated that around half a million tonnes of plastic microfibres shed during the washing of plastic-based textiles such as polyester, nylon, or acrylic end up in the ocean annually.

Sustainability and circular design have represented the inspiring principles of the new processes created by Iris Textiles. The eco-industrial techniques adopted have led to reduce carbon emissions, water, energy usage, and vastly minimize the consumption of new virgin raw material. The process is chemical-free and dye-free. They do not add any synthetic fibers such as polyester, nylon, acrylic, and they are committed to creating products that are all 100% natural and compostable.



Using this textile-to-textile upcycling system, the New Denim Project has managed to create a closed-loop industrial mill. The company estimates that for every kilogram of upcycled textile waste, they save up to 20,000 liters of water and for every ton of upcycled textiles, 20 tons of CO2 are prevented from entering the atmosphere. In 2018 alone, the Project upcycled 834,474 pounds of discarded fibres and textiles. That equates to 7.57 billion litres of water having been saved, along with the elimination of 800,000 pounds of toxic chemicals. This system has also exponentially reduced the use of natural resources, and both consumption of and dependence on new virgin raw material.



To close the cycle and be responsible with its own waste the company for example provides the cottonseed and cotton lint, leftover material from the upcycling process, to the organic coffee-growers of the Finca San Jeronimo Miramar in the highlands of Guatemala, to use it as compost. The farm mixes the factory's cotton seed, waste generated during the spinning process, with manure, garden clippings, coffee pulp, wood chips and other kinds of organic residential waste. The resulting natural fertilizer nourishes a wealth of crops from coffee and cacao to bamboo.



Although the main focus has been environmental responsibility, since the founding of the factory is also committed to providing an unconditionally healthy and secure work environment for all employees, as well as freedom of association and fair labor practices. The workplace standards are compliant to Guatemala's local laws and regulations and the Code of Conduct of the company have a zero-tolerance policy towards child labor, forced labor, discrimination, harassment and abuse.



Building the new circular manufacturing process, the company also envisioned new supply chain relationships less linear. They have created a more open connection between all contributors, opening new communication channels within the supply circle: farm, mills, studios, brands, clients, shops. The company also works with more than 800 Guatemalan artisans practiced in the traditional arts of the hand and foot loom, who weave the new yarn into quality one-of-a-kind goods, often in upholstery and home textiles. In alliance with a wide range of partners and different brands, taking into account the many design possibilities, the fabrics of the New Denim Project are used to create women's and men's fashion, packaging, as well as products for homes and the kitchen.



This approach has allowed the company to build a network of allies and partners who have facilitated the promotion of the new sustainable and high-quality products, while they collaborate at the same time in highlighting with consumers the new sustainability and environmental responsibility strategies that generated them. As the company points out on its website, the New Denim Project is leading the way towards a sustainable and thriving industry, operating under a circular economy, changing practices to emulate sustainable natural cycles, where all discarded materials are designed to become valuable resources for others to use.



The success of the innovative production processes of New Demin Project is showed on the website by [many articles of prestigious fashion magazines](#) that emphasize his contribution to the transition towards a fashion industry respectful of the environment.



To know more

[New Denim Project website](#)

[New Denim Project in Facebook](#)

[New Denim Project - Press release](#)

[Iris Textiles in Facebook](#)

[Article in Guatemala.com](#)

[Article in intentjournal](#)

[New Denim Project in blogs.iadb.org](#)

[New Denim Project - Orange Economy in iadb.org website](#)

[Article in thr3efold](#)

[Article in america-retail.com](#)

[Article in read.luv.it](#)

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