

Recycled Fabrics Going More Mainstream

Proponents of the biomaterials sector say fabrics made with natural substances grown in a laboratory could have more allure than traditional fabrics.

By [Sofia Celeste](#) on November 21, 2016



A Biofabricate indigo jacket.

MILAN — Plastic bottles, amino acids and forgotten textile scraps are unlikely components for luxury gowns, but there are real signs that they have the potential to become regular components of the fashion industry.

When Livia Firth walked the red carpet wearing a whimsical, Cinderella-like Valentino gown made with recycled PET fabric in 2012, sustainable textiles were still fairly alien to high-end consumers. But initiatives like Firth's Green Carpet Challenge that has since been embraced by stars like Emma Watson and Cameron Diaz, has fueled a curious industry that is rapidly evolving and could play a large part in saving the planet.

The ethical fashion movement, trail blazed by animal rights activist and designer [Stella McCartney](#), now includes names like Gucci, Max Mara, Burberry and Calvin Klein — vanguard brands that have been rather low-key about the details of their [sustainable](#) strategy but have used upcycled or recycled materials in some of their collections.

In traditional markets like Italy, materials like Newlife, a silky polyester made from plastic bottles, have surpassed the test phase and are already generating serious revenue, while experimental markets are emerging in the biotech heartlands of the U.S., where a biomaterials wave is taking shape.

Proponents of the biomaterials sector say fabrics made with natural substances grown in a laboratory could have more allure than traditional fabrics or even upcycled ones.

Suzanne Lee, who is the creative director of Modern Meadow Inc., said biotechnology offers the opportunity to create an advanced product because it doesn't rely on how silk is woven or knitted.

"You can think of new properties to make it even better," Lee said.

Her company is led by an innovative New York-based team of scientists, engineers, designers and artisans who are developing sustainable materials with cultured animal products.

In Italy, sustainable fabrics like Re.Verso made by Tuscan-based wool mill Filpucci, and Bacx, a line of organic silk made by Italy's Centro Seta, are being produced competitively.

Gruppo Cinque, a Como-based company that manufactures Newlife in jacquard, as well as in water-repellent and perfluorinated compound-free variation, made the Newlife fabric used in Max Mara's Weekend collection.

Newlife uses 94 percent less water than other materials and reduces carbon dioxide emissions by 32 percent. Other brands that use Newlife are Burberry and Calvin Klein, the house that made Emma Watson's monochrome gown for the Met Gala in May.

"Newlife is certainly used for evening gowns, as it is a perfect substitute for silk, particularly silk taffeta," said Gruppo Cinque cofounder Lorella Paulotto.

Gruppo Cinque ventured into polyester in 2012 and now generates 50 percent of its sales from sustainable fabrics, which also includes another groundbreaking fabric: Econyl, a nylon that is made from old fishnets.

"I now see a broader variety of available fabrics," said Re-Bello cofounder Daniel Sperandio. "Today there are a lot of new technologies and sustainable fashion is almost fully comparable to traditional fashion in terms of opportunities."

Re-Bello is made in Italy with innovative sustainable fabrics like PET, Newlife and leather tanned with dyes derived from olive leaves and beechwood.

Experts say that the luxury industry should do more to communicate its participation in the sustainable movement.

Data compiled by the Fashion Revolution's Fashion Transparency Index showed fast fashion brands like H&M, Inditex and [Levi Strauss](#) & Co. received a top rating of 76 to 100 percent in terms of communication, while brands like Chanel, Hermès, Fendi, Prada and Gucci all scored between 0 and 50 percent.

"We can achieve a sustainable industry but the everyday consumer needs to know," said Giusy Bettoni, chief executive officer and founder of CLASS, a worldwide multiplatform network that promotes fashion, textiles and materials created using sustainable technology.

But sustainable fabrics aren't cheap. Newlife is priced about one euro higher per meter than traditional polyester. Many biofabricated materials, which are now still in their zygote stages, have yet to be priced, explained Lee. But when they are sold on the market, they will be produced in small volumes and will be priced on the high-end.

"This can change over time and it can become more accessible in a broader range of markets," Lee said.

Slowly, consumers' ethics are changing around the globe, as individuals focus on detoxing their bodies and their closets.

“We liken the shift to what happened in the beauty and food sectors — people started focusing on health from the inside out and now that has finally come to the forefront of including the product you wear on your body,” said The Vertical Collective ceo and cofounder Katherine Zabloudil.

Zabloudil said The Vertical Collective has advised some of its clients to work with sustainable materials makers like Piñatex, a London-based company that makes sustainable textiles from pineapple leaf fibers.

“We are absolutely seeing a big shift in new clients wanting to use sustainable eco-smart materials,” she said. “We love these types of projects, as it pushes us to challenge our suppliers and manufacturers to think smarter and cleaner.”

New trailblazing brands are emerging through sustainable fashion e-commerce sites like Maison de Mode, a sustainable luxury e-tailer founded by Hassan Pierre and Amanda Hearst.

Maison de Mode will host a pop-up at Art Basel at Miami’s Faena Bazaar from Nov. 25 through Dec. 4 that will showcase Viktor & Rolf’s fall couture collection made entirely of recycled fabrics from past collections.

“Luxury consumers are extremely educated and aware of global issues and they aren’t just looking to buy anything, which is why designers and brands are thinking outside the box and are creating truly unique one-of-a-kind pieces and are incorporating artisan techniques and sustainable practices in their designs and production,” Hassan said.