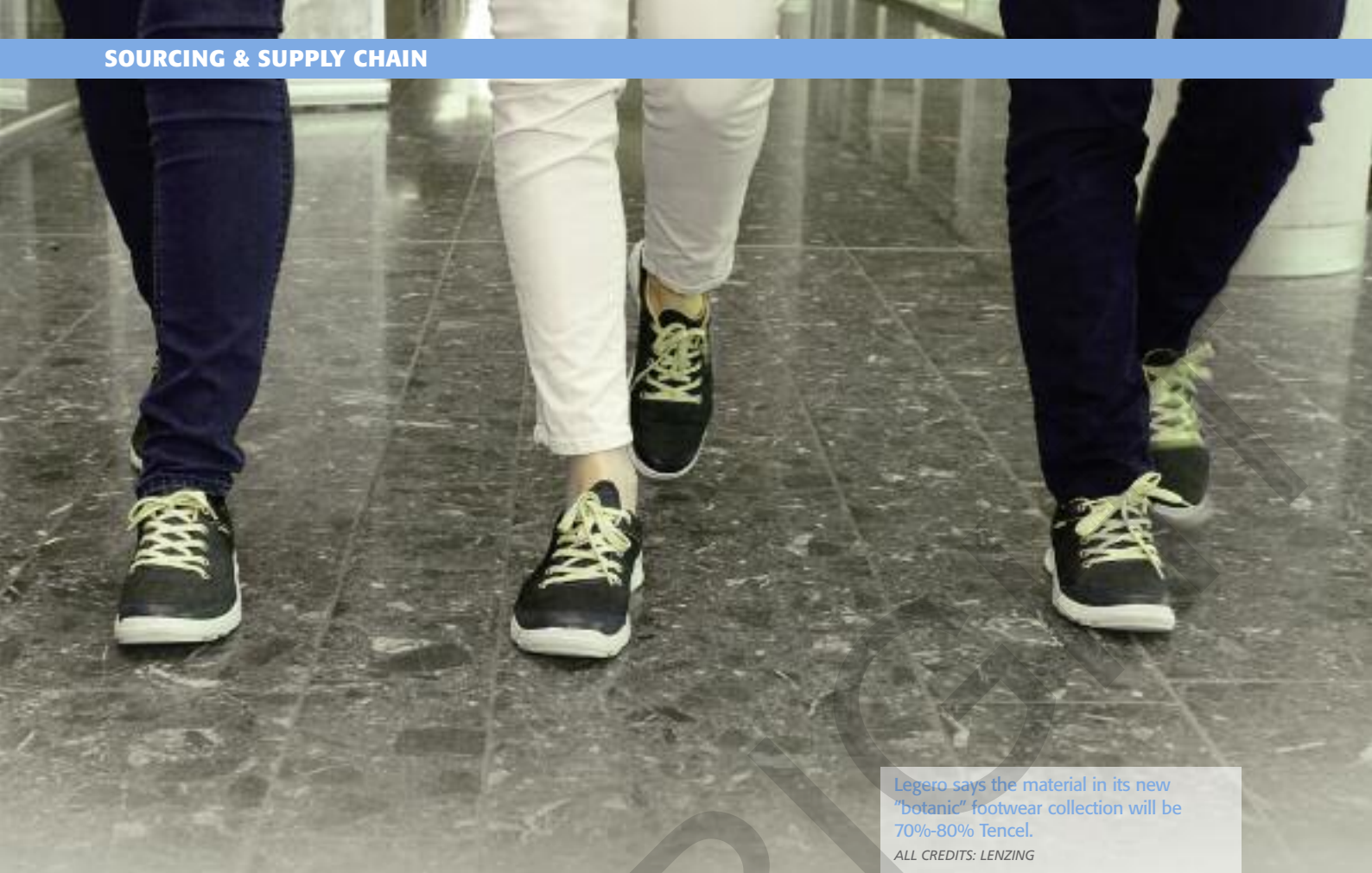




Legero says the material in its new "botanic" footwear collection will be 70%-80% Tencel.

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Austrian fibre manufacturer Lenzing has worked with footwear brand Legero to put its renewable Tencel lyocell fibre into shoes for the first time.

Lenzing takes Tencel into shoes

Cellulosic fibre producer Lenzing has announced a new development with Austrian footwear brand Legero to incorporate its Tencel fibre into shoes. Tencel is of botanic origin since it is extracted from wood and Lenzing describes the closed-loop process it employs to produce the fibre as "extremely eco-friendly". The two companies announced the partnership and presented their "botanic" shoes concept at a joint press conference at the Techtextil exhibition in Frankfurt in May.

Lenzing's segment manager for footwear, Marina Crnoja-Cosic, says the move into footwear came about partly because her company needs "new applications for Tencel". She also explains that footwear companies, including Legero, came to Lenzing specifically to ask for Tencel to put into their shoes.

Its work with Legero has led to prototype shoes using high volumes of Tencel as part of the content, which the Graz-based footwear company is now preparing to introduce to the market under its Vios brand, a new brand under which it aims to sell only its most sustainable shoes.

Positive acceptance

Sustainable development and innovation manager for Legero, Stefanie Stolzka, says her company is paying closer than ever attention to the raw materials that go into its shoes and launched a prototype using Tencel in 2014, selling the shoes, a small collection for children, in its outlet store. "The uppers are leather," Ms Stolzka says, "skin-friendly, sustainable and chrome- and heavy metal-free. But the laces are 100% Tencel."

She says the initial collection has won positive acceptance from customers who have bought the shoes and that her company will launch a first commercial collection, for children, in 2016. She and Ms Crnoja-Cosic wore prototype summer canvas-style shoes for the presentation, with the uppers made from cotton and Tencel.

Well suited

It is Ms Crnoja-Cosic's opinion that cellulosic fibres are suited to footwear. They offer comfort, she says, because of their high levels of moisture management (50% better than cotton, she



Tencel allows footwear companies to offer compostable shoelaces and more sustainable footbeds.

says) and their ability to help footwear brands build up their sustainability credentials. But she admits that shoes are complex. "When we first looked at footwear, we found it very complicated," she explains, "with five or six different supply chains involved." Just in its work on prototypes of shoes and shoe components containing Tencel, Lenzing has worked with a wide range of partners, including soling and footbed technology providers Delta from Italy and Mucos from Austria, German company Carl Klostermann Söhne on laces and, on other materials, with Eurofoam, a Vienna-based foam technology provider. Test and research institute Pirmasens also played an important role in the development of the shoes with Tencel, as did the International Shoe Competence Centre at Pirmasens, and all of the prototypes were made there.

Multi-use

These examples perhaps serve to show how flexible Tencel can be. Lenzing supplied the fibre in powder form to Mucos, for example, which specialises in products from cork. The soling company blended the Tencel and cork together for use in a footbed. Its collaboration with Delta was to use Tencel and polyurethane (PU) together in an outsole application, while the appeal of Tencel to some partners was that Lenzing's fibre allows them to offer shoelaces that are 100% compostable. "We are very proud of the compostable shoelaces," Ms Crnoja-Cosic says. "They are available in nice, bright colours and, as well as being compostable, meet all standards for abrasion resistance, durability and so on."

She also anticipates further developments in upper materials. In addition to the canvas style she and Stefanie Stoltzka wore at Techtextil, she says footwear brands like the idea of developing uppers for summer shoes that have a mix of Tencel and linen on the outside and of Tencel and polyester on the inside.

Mutual support

According to Ms Stoltzka, Legero decided to work with Lenzing after 'looking at itself in the mirror' and deciding that, if,

in addition to having a "passion for shoes to be beautiful", it wants to make a selling point of producing its shoes in Europe, it ought to use materials produced in Europe too. "We had Lenzing on hand in Austria," she says, "and Lenzing had Tencel, which we know is a fantastic fibre because it's so sustainable, so we began talking to them. It's important that we in Europe support each other and work to keep our know-how here."

At the moment, Legero shoes are being manufactured in Romania using direct-injection PU soling; textile uppers will work well in that set-up, Ms Stoltzka insists. The uppers in the shoes in the new collection will have some cotton, but between 70% and 80% of the fabric in the shoes will be Tencel. "It will be a premium collection," she explains, "available through specialised retailers only. We want a high level of service to be available to the consumers who look at these shoes. We want retailers to tell customers the 'botanic' story of the shoe and to share some of the passion we have for it" 🗣️



Lenzing's segment manager for footwear, Marina Crnoja-Cosic (left), with sustainable development and innovation manager for Legero, Stefanie Stoltzka.