



The Östra collection combines innovative technology with sustainable materials | Photo source [Spektrum Sports](#)

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HIGH-TECH SKI GOGGLES MADE FROM BIOPLASTIC

 SPORT & FITNESS

A Swedish company has developed high-tech, high-end ski goggles using bioplastics designed specifically for ski wear

Spotted: Swedish sports eyewear brand Spektrum has launched a new collection of ski goggles made with its signature plant-based bioplastic. The company is known for its use of plant-based materials and its new line of goggles, dubbed Östra, adds a number of innovative features.

The company's frames are made using a resin made from corn and castor bean derivatives that are not intended for human consumption. Spektrum uses a unique process that modifies the materials to create polymer pellets that are then injected with colour. This ensures a deep colour throughout all of Spektrum's frames and the overall process improves durability and scratch resistance.

The company claims that the use of biomaterials also spares workers, and the environment, from exposure to hazardous solvents and chemicals. The new Östra collection also features a magnetic lens exchange system to allow the lenses to be replaced quickly and easily. One model includes a Zeiss photochromic lens which can rapidly adapt to different light conditions. Pivoted outriggers on the frame allow the pressure on wearer's faces to be adjusted to give an ergonomic fit.

The company recently won an ISPO gold award for its dedication to sustainability. Commenting on the award, Spektrum CEO Andreas Nilemo [said that](#), "Spektrum is committed to design and develop eyewear in a sustainable way. To win the Gold Award at ISPO proves that our dedicated work has paid off and that we as a company are on the right path for the future".

Here at Springwise, we have noticed that eyewear manufacturers have been at the forefront of the move towards using sustainable plastics – particularly bioplastics. We have seen this is recently-

covered innovations such as eyewear 3D printed from a plastic derived from [castor beans](#), and eyewear made from plastic made from [cooking oil](#) waste.

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Takeaway:

To develop sustainable substitutes for the environmentally-harmful plastics and polymers commonly used in the manufacture of snow goggles, Spektrum worked with leading scientists at the Sports Tech Research Centre at Mid Sweden University. The new collection includes the “White line,” designed for foggy conditions and featuring Zeiss Sonar technology; the “Black Line”, which has dark lenses to protect the eyes from glare; the “Bio Premium” edition for enhancing vision in medium to low light; and the water-repellant “Östra Photochromic” model. The collection demonstrates that top-of-the-line sportswear can be both technologically advanced and sustainable.