

Circularity – the view and approach of a cellulose fiber producer

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Climate change, resource scarcity and loss of biodiversity are some of the biggest problems humanity is facing. Due to their complexity and impact, a joint approach is needed to solve these challenges. The urgency to act also increasingly recognized by policy with new regulations becoming effective – on national and international level.

Lenzing as a leading producer of man-made cellulose fibers (Viscose, Modal and Lyocell) has been very active in the field of sustainability for many years. To increase the activities towards a circular economy is the next step and this presentation highlights some key efforts.

One pillar is the development of new technologies. An example is the cooperation between Södra Cell, Sweden and Lenzing in the field of textile recycling. Building on the expertise of both companies a large-scale process for the conversion of used textiles into high quality pulp is developed. In the course of this project both companies also cooperate with additional partners (like sorters) to achieve a truly circular solution.

This extended cooperation and networking is the second important ingredient to achieve circular solutions. Therefore Lenzing is very active in this field – both in research projects and in initiatives. Lenzing is partner in the Horizon Europe project CISUTAC (Circular and Sustainable Textiles and Clothing), which follows a holistic approach regarding textile circularity, taking into account various aspects. Furthermore, Lenzing is a member of the Renewable Carbon Initiative from the very beginning and actively pursuing the concept of renewable carbon.

Biobased materials are one of the sources of renewable carbon (recycling and CO₂ are the other two) and so this concept includes the natural cycle as well. In addition to the technical cycle (reuse, recycling,...) this means that carbon from materials returns as nutrient to nature and forms the basis for new materials. Usually this happens via biodegradation, which is important for fibers as well – microfiber release from textiles or disposable non-woven products. So, a look at this topic will complete this talk.