

ABSTRACT FOR PRESENTATION

Renewable Materials Conference, 18 - 20 May 2021, Maternushaus, Cologne,

Presenting Company: *FKuR Kunststoff GmbH*

Working Title: *Circular Economy: Raw materials, applications, end of life – what needs to be considered to be successful*

Session:

Speaker: *Patrick Zimmermann, Executive Board Member*

Description:

Circular economy and recyclability are widely discussed topics today. Especially recyclability has a high priority when it comes to politics and consumer acceptance. But still most plastics are made from a CO₂ one-way source like crude oil and no one is really questioning this status quo. Instead of re-thinking the actual status quo, more and more concerns are being raised about renewable raw materials. Of course, the concepts of compostability and biodegradation for plastics are often misunderstood and easily confused, as well as seen as a threat for recycling. However, it is essential to close the carbon loop and not only the material loop in order to progress towards a CO₂ neutral industry or society.

In this case, we need to use biobased and renewable materials; even if they are biodegradable by their nature. Additionally, we need to use more recycled materials and we also have to combine them with biobased materials to reduce the emission of virgin CO₂. There is a need to use renewable raw materials that have interesting properties beyond biodegradability. For instance, PLA can also be used for applications where biodegradation & compostability are not required as the end of life option. For this purpose, PLA needs to be modified accordingly so that other, more technical markets can be developed.

Content of the presentation:

- Introduction FKuR
- Bioplastics Circular Economy
- 8 Ideas for a circular Economy
- Advantages whilst using biopolymers
- Summary and Outlook