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# How to enable business and climate benefits while going circular?

Abstract for “Renewable Materials Conference 2024”

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A Circular Economy aims to decouple growth from resource consumption and is regenerative by design. For the chemical industry one important pillar is to rethink the origin and design of resources and to keep them in use as long as possible. In addition to new business models, and new material cycles, renewable and recycled feedstocks from sustainable sources can support in closing the loops. The pressing issues like climate change demand a transition which is efficient and fast. Therefore, a range of different approaches to redesigning products and processes towards more sustainable solutions is needed, some of which may become effective earlier and enable the transition to circular economy, until new technologies and assets will be established at the necessary scale. A mass balance chain of custody model has great potential as an enabler of the European Green Deal transformation. It encompasses all sectors and is a pragmatic approach to boost contribution of renewable and recycled products, moving away from fossil derived alternatives. Using a certified mass balance approach, sustainably sourced circular feedstocks can replace fossil feedstocks in existing efficient, complex, and interlinked productions systems. The resulting quality and properties of the products can be maintained, while greenhouse gas emissions and fossil feedstock inputs are being reduced.

The presentation will reflect on needs to accelerate the transition towards climate neutrality through business and political action. Recent use cases based on recycled and renewable feedstocks from industry will be presented and discussed regarding their effectiveness in ramping up the switch to alternative raw materials.

**Key words:** decarbonization, circular economy, recycled and renewable feedstocks, mass balance chain of custody, fossil resource savings, carbon footprint reductions