## Collaboration now! Towards a Circular Economy.

Dr. Patrick Gloeckner, Head Global Circular Economy Program Evonik Operations GmbH, Marl, Germany

Circular Economy (CE) is an economic system to overcome the challenge to reducing the use of fossil feedstocks and the incineration of waste on the one hand while creating sustainable value for people and society on the other. Evonik is significantly expanding its commitment to developing solutions for Circular Economy. From 2030, the specialty chemicals company aims to generate at least €1 billion additional annual sales with circular products and technologies. Activities are bundled in the group-wide Circular Economy Program.

## **Enabling circularity**

The strategy is based on several levers to enable holistically the transformation towards a Circular Economy. The author will give an introduction to the following topics:

- Making mechanical and chemical plastic recycling processes more efficient and improving yield and quality of the resulting recyclates
- Recycling technologies for selected waste streams for future economic high-value recycling routes, for example, catalysts rejuvenation, monomer recovery for polyurethanes and hardto-recycle-PET waste streams
- Consideration of circularity aspects in the design of products and goods with different material sources, including simplified designs for better recycling, extended lifetime, or improved durability
- Biodegradable solutions for use in application where collection and recycling is challenging
- Defossilization of products and goods by using raw materials based on recycled materials, biomass and CO<sub>2</sub>

## Collaboration is key element of Evonik's Circular Economy Program

Our Circular Economy experts support companies in transition towards circular applications of high value by making their manufacturing processes more efficient, considering Design-for-Circularity aspects, improving product carbon footprints – all-in-all, by meeting the company's goals and value chain ambitions. A successful circular economy requires, above all, strong collaboration and great teamwork. Therefore, Evonik brings partners along the different value chains together to building ecosystems to jointly understand and overcome hurdles, sharing knowledge, risks and costs, and to accelerate the time-to-market with ecosystem solutions that work.