

## Seize the opportunity

What measures are underway to support the transformation of the current linear economy into a circular economy? Across the globe, the importance of an integrated approach to recycling has been underpinned by legislation. In the EU, strict regulation of packaging and packaging waste has been a key driver in improving waste management practices. For instance, under the Directive 94/62/EC, packaging manufacturers have a legal obligation to reach even higher recycling targets, determined by the type of material to be recycled. While in Germany, legislation has stimulated innovation, too. By charging manufacturers a license fee for the "dual system" according to the recyclability of the material used, such regulation has led to the design of eco-friendlier packaging.

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**"In the future, our tools will enable the development of sustainable paper and board-based packaging already in the design phase."**

**Dr. Tiemo Arndt**

Business Unit Manager of Fibers and Composites at PTS, Germany

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The focus, however, needs to be not only on recycling, but also on refuse collection and sorting. Do end-users dispose of products in the correct container? Is it technically possible to actually break down these products into the defined reusable fractions at the recycling plants? Essentially, this success rate depends on the product design. For decades, the paper industry has used the same recognized method to determine whether paper-based packaging is recyclable: the PTS-RH 021/97. This method was designed by PTS, the independent research institute based in Heidenau, Germany.

As plastic packaging is replaced more and more by paper-based solutions with similar characteristics to plastics, paper recycling is lifting off toward new horizons. The PTS is currently developing new tools to determine the recyclability of paper and board-based packaging in advance – based on the composition of the individual materials used in their manufacture. The motto will be "Test today, predict tomorrow." →