CIRCULAR TRANSITION INDICATORS
CASE STUDIES

Organization Name:
Allnex

Industry:
Basic Materials, Chemicals

Number of employees:
4,000

Annual revenue:
€ 2 billion

Website:
https://allnex.com/en

We want to contribute to a greener world by making circular thinking the core principle of how we do business. We aim to achieve this by designing products with enhanced longevity or intended for multiple uses, increasing resources' productivity as well as reducing the use of finite sources.

Miguel Mantas,
CEO Allnex

Why are circular metrics interesting to your company?

Allnex is a leading supplier of specialty chemicals, offering a broad range of resins, additives and crosslinkers for use on wood, metal, plastic and other surfaces. Our mission is to lead in innovation, quality and reliability, and to create value in all that we do. We strongly believe in the power of the Circular Economy because it aims at reducing environmental burdens through the valorization of material flows. The ability to quantify and report on our circular performance is key to translate our ambition into goals and identify opportunities for improvement. CTI can help us translate our circular vision into a strategic roadmap and monitor progress as we embark on our journey towards circularity.

Key challenges

At Allnex, we have a strategic focus to improve our circular inflow through the introduction of non-virgin and renewable building blocks in the manufacturing of our resins. For this reason, we have focused the CTI assessment on the specific case of a new polyester resin containing recycled PET, manufactured in our plant in North Augusta, South Carolina, USA.

Setting the scope of the exercise has been one of the key challenges. We had several conversations with the project team, evaluating various options and considering the need to balance potential data availability issues within a limited timeframe with the expected value from the exercise.

Solutions

We decided to focus on a single product to minimize potential issues with data availability and rather focus on the opportunity of understanding the structure and potential of the CTI framework and tool for future use.

We selected the key indicators considering that we had a specific interest on defining the impact of the adoption of non-virgin and bio-based material in the product, while we chose a simplified approach to allocate the outflows contribution to product level from data available on a production site level.

Results

Based on the CTI assessment, we are now exploring the impact of increasing renewable material content to significantly improve the circularity of the product we analyzed.

Using CTI at a product line, site or at corporate level, we expect it will support us to identify opportunities for improvement and highlight the areas where we can achieve the highest impact.

We also expect that future developments of CTI will assist us in quantifying the impact of our specialty chemicals as enablers of more circular downstream products.