

CIRCULAR TRANSITION INDICATORS

CASE STUDIES





We develop solutions for the energy, mobility and environment sectors with the purpose of creating a smarter future for a better life. Circularity, an aspect of Efacec's sustainability strategy, requires an in-depth knowledge of global operations and portfolio, including circular flows in the value chain. Participating for the second time in the CTI pilot promotes this knowledge which has a direct application in the design of products, solutions, and operations, reinforcing the identification of circular opportunities and promoting dialogue with stakeholders.

Cristina Godinho,

Director of Quality & Sustainability, Efacec



Why are circular metrics interesting to your company?

The circular economy is fundamental for a sustainable energy transition. Circular metrics allow companies to conduct an assessment of product circularity, identify improvements and design tangible action plans along the value chain. It enables the mitigation of linear risks, such as shortages of raw materials and price volatility, as well as identification of business opportunities and innovation.

The growing requirements of customers represent an incentive to improve these metrics. With regards to the area of electric mobility, we have been sharing these requirements with the supply chain to incorporate circular strategies in the initial phase of product design and industrialization.

Key challenges

Several challenges have been identified during the circularity study of the electric mobility charger, namely: (i) lack of information on the circularity of materials and evidence of their composition in the supply chain; (ii) obtaining information on the end of life of the equipment since most installed electrical chargers have not yet reached full life expectancy; (iii) limited control and traceability of the product after it has been sold; (iv) lack of information on the source of energy used during the operation of the product.

Solutions

It was possible to identify several actions to increase the overall circularity of the product. For example: i) explore the integration of a material passport into the procurement process to increase the circularity of incoming flows; (ii) establish a holistic approach with suppliers in regards to a more detailed understanding of incorporated materials; (iii) establish partnerships with universities and research centers to explore the use of alternative materials; (iv) increase the recovery potential by optimizing product design; (v) analyze commercial incentives to increase the circularity of outflows.

Results

CTI helped us understand the challenges and pathways to improve our circular performance through the process of data collection, analysis of results, prioritization of risks and opportunities and through the evaluation of circular solutions. The assessment informed the formulation of goals, improvement actions and identification of synergies. Results demonstrate the need to obtain more detailed information about the origin of materials and their criticality through the company's internal processes. Cooperation between stakeholders is key to achieve the full potential of long-term circularity and success.