



CIRCULAR TRANSITION INDICATORS CASE STUDIES



We focused the CTI assessment on an oil immersed distribution transformer that incorporates steel, copper, and insulating oil. Implementing a circular economy is naturally a disruptive and complex process. A key challenge was defining the scope of analysis given that the durability of products is not adequately considered in CTI. Therefore, in our assessment we did not include end of life services.

Obtaining information about the incorporated materials from the supply chain was another challenge that we faced. This underlines the importance of establishing a common language with our suppliers and clients to facilitate collection of data and implementation of a circular strategy.

A sustainable management of resources is a strategic and fundamental objective of our business. Our involvement in the pilot study of the CTI framework contributed substantially to deepen our knowledge about circularity indicators and define improvements. We believe that circular metrics provide short-term benefits and long-term strategic opportunities. Collaborating with a common language is fundamental to promote circular business models and co-create circular solutions.

Anabela Magalhães,

Head of Sustainability, Efacec

Why are circular metrics interesting to your company?

Efacec develops and delivers integrated solutions in energy, mobility, and the environment with the purpose of designing a smarter future for a better life. We have the objective to design innovative products and work with our supply chain to contribute to the decarbonization of the global economy and promote the adoption of circular strategies. We are interested in circular metrics because we believe it allows us to measure and improve upon our circular performance. Through this framework, Efacec can understand its progress, monitor it over time, and use these metrics to inform key stakeholders.

Solutions

In the case of our CTI assessment, we already had performed a life cycle analysis for the immersed distribution transformer product. This facilitated access to all necessary data and our ability to apply the framework. A multidisciplinary team carried out the assessment thus ensuring a comprehensive and complete application of the methodology.

The CTI assessment has allowed us to measure weaknesses and identify key improvement actions that we have now prioritized and are in the course of development.

Results

The CTI framework allowed us to analyze our circular performance through a structured process. The calculated indicators demonstrate a relatively high circular percentage of material inflow and outflow due to the significant degree of circular materials. The results have made us aware of the key points that need further development, specifically the necessity of having deeper information regarding the origin of materials and their criticality. In sum, applying CTI helped us characterize how circular is our equipment and identify more efficiently the risks and opportunities inherent to the manufacturing of our product.