

CIRCULAR TRANSITION INDICATORS

CASE STUDIES



Organization Name:
EDP, E-REDES

Industry:
Energy

Number of employees:
EDP Group: 12,180
E-REDES: 2,936

Annual revenue:
EDP Group: EUR 12,448 million
E-REDES: EUR 1,266 million

Website:
<https://www.edp.com/pt-pt>
<https://www.e-redes.pt/pt-pt>

Key challenges

We started our CTI assessment by selecting a pilot in collaboration with E-REDES. After a set of internal and external meetings, we identified the first challenge of the limited data provided by the supply chain. As a service business, E-REDES does not produce any product, and the one that was chosen, a smart meter equipment, is made of a diverse set of materials, including critical raw materials. Measuring outflow recovery represented another challenge. We work with a great number of service providers over the country that send our equipment to different waste management operators. Depending on the operator's recycling technology, recycling protocols and recovery rates are different for each waste handler.

Solutions

During this exercise, we involved a great number of departments, business units and business partners. Even though several solutions were identified by these stakeholders to increase the product's circularity, for this specific pilot we focused our improvements efforts on the inflow. Within the diversity of existing materials, we chose the one that was most feasible to change without compromising the equipment's functionality: the smart meter's plastic case. We identified a number of solutions to increase the lifespan of the outflow, as well as the possibility of creating new kind of services to support these innovations.

Results

CTI revealed a low global % circularity for our product, despite the high level of circular outflow. Based on this result, and assuming the inflow as a key element to increase overall % circularity, we were able to simulate a 50% increase of recycled material for one type of inflow, and the circularity of the smart meter equipment increased to 27%.

The CTI assessment demonstrated how difficult it is to gather reliable information and how far we need to probe to obtain it. We are aware of the impact that the circular economy can have on our activities and suppliers' services, so we will extend the CTI assessment to more materials and involve more stakeholders.



The transition to a circular economy is a challenge that EDP and its distribution network operator, E-REDES, have stepped up to with the aim to reduce their environmental impact and dependency on natural resource exploitation and linear consumption. This work led both companies to explore new circular metrics that would help them establish a state-of-the-art monitoring framework to drive future improvements. CTI guided them on the first circularity measurement and introduced a common language towards internal and external cooperation.

Sara Goulartt,
Environment and Climate Deputy Director, EDP SA



Why are circular metrics interesting to your company?

EDP Group's circular economy strategy aims to implement a corporate roadmap with targets set for 2025. The roadmap is supported by specific action plans of each business unit. In the next years, our main goals to promote the supply chain commitment to circular economy practices include: improving contractual clauses with suppliers, training employees and involving the supply chain. CTI offers the framework to simplify circular economy concepts, interpretation and communication between all stakeholders involved. It enables companies to monitor their performance and simulates the impact of new improvements.