LIPOR works in close collaboration with its stakeholders. Now, with the CTI framework, we can communicate more responsibly and more transparently with our suppliers as well as with our clients. Only through a close relationship it is possible to gain an understanding of priorities, provide an excellence service and promote projects that match the expectations of those who work with LIPOR.

Aires Pereira, Chairman of the Board of Directors, LIPOR

Why are circular metrics interesting to your company?

Lack of information and awareness around existing opportunities are an important obstacle in the transition to a circular economy. These are necessary to organizations and policymakers to design products, processes and exercise decision making in line with circular practices. At LIPOR - Intermunicipal Waste Management Service of Greater Porto, we believe that circular metrics are an asset to capitalize on the opportunities offered by the circular economy. To achieve circular objectives, a common language is crucial, especially in terms of comparability and progress measurement. Bio-waste prevention and recovery plays an important role in closing nutrient loops, preserving biodiversity, reducing greenhouse gas emissions, and materializing a sustainable bioeconomy. In this context, we have been expanding our activities around bio-waste through the development of an integrated and circular strategy for the sustainable management of these streams.

Key challenges

We focused the CTI assessment on the level of circularity of Nutrimais®, a 100% natural organic compost that results from the composting process of food and green waste, separately collected at source. We have not faced relevant challenges regarding the characterization of the % recovery potential and % actual recovery of the outflows, since the outflow materials are very well mapped in terms of quantities, typology, and destination.

Solutions

We created a diverse task force of technicians from our sales and management, operations and sustainability departments. We held regular meeting to coordinate data collection, involving not only the LIPOR team, but also the Composting Plant Exploration Entity. For the selection of indicators and data collection, a match was made between the CTI framework and the data that LIPOR collects on a regular basis for its reports and evaluations. Considering all the analysis carried out within the scope of the study, we were able to list several actions that we consider will improve Nutrimais® entire process.

Results

The results obtained presented a very positive circularity score for the Nutrimais® process, which is explained by the high circularity levels of the inflow (constituted by waste) and outflow (most of the materials are either recycled, compostable, or are reintroduced in other processes). The product itself is considered circular since it is a regenerative and restorative compost that improves soil quality. The analysis of the results enabled to pinpoint several opportunities for improvement, such as the development of new, high-quality natural products for agriculture, the identification of other treatment options to value waste that is currently not being recycled, as well as the study of more sustainable packaging forms.