

CIRCULAR TRANSITION INDICATORS

CASE STUDIES



Organization Name: The Navigator Company

Industry: Forestry & Paper

Number of employees: 3, 232

Annual revenue: EUR 1.385 million

Website: en.thenavigatorcompany.com/



The transition to a circular low-carbon economic model is more relevant than ever. With a business that originates from nature and by making a responsible use of resources, Navigator's products best respond to the challenges and opportunities of a circular bioeconomy. Although resulting in more demanding economic models, circular metrics can potentially foster a more competitive future and articulated answer across all value chains.

João Lé,

Executive Board Member, The Navigator Company

Why are circular metrics interesting to your company?

Today, attention to the circular economy is indisputable. For Navigator, it may lead to seizing competitive advantages, reducing the use of fossil-based materials in production processes and integrating circular bioeconomy principles. A circular economy stresses the importance of establishing industrial symbiosis and the ambition of achieving targets concerning the use of resources and waste. As a tool for measuring and monitoring circularity, the CTI framework may provide stronger analysis as its supporting information becomes more complete and universal, with the involvement of different actors across the value chain, from suppliers to waste management operators.

Key challenges

We found that key challenges to our circular improvement in production processes include exploring more circular inflow options, outflow valorization solutions and process efficiency improvements. In line with our commitment to promote a circular bioeconomy, Navigator has been working on these areas, giving privilege to R&D solutions. Although a life cycle assessment had already been performed for the product under scope - Uncoated Wood Free (UWF) paper from Figueira da Foz mill, in 2019 - the main challenge in using the CTI framework was the collection of many of the inflows and outflows' information, as the required level of detail is not easily available in references, nor provided by the value chain.

Solutions

The pilot test involved our colleagues from R&D, Environment and Sustainability departments, making it clear how important it will be to work over other dimensions as, for instance, with procurement and value chain actors, targeting the collection of information on the circularity of purchased products/materials. At the same time, Navigator will continue developing projects that aim at improving outflow recovery and process efficiency, as mentioned in the targets of the CTI assessment.

Results

High recyclability of Navigator's UWF paper and processes underlying its circularity are well known, based on the ability of wood fibers to be used up to 5 times (products) during the first year of its life cycle, in a cascading way. Additional insights from the CTI assessment allowed us to confirm our product's outstanding circularity, showing a result of already 96% circular for inflows and a potential of 97% of valorization for outflows, revealing yet some margin for progress.

This result is due to several factors, including that the main material, namely eucalyptus fiber, is a renewable virgin raw material purchased through a forest certification scheme.