

## POMAR

Plataforma de Otimização de Materiais e Remanufatura (Remanufacturing and Materials Optimization Platform)

This Co.Project set out to identify opportunities for sharing available materials and expertise, in order to boost remanufacturing activities in Brazilian industry. The first phase of this Co.Project launched a series of pilot projects among Brazilian members of the CE100 network and has generated important insights for a potential follow up research piece looking to address some of the challenges faced in the prototyping phase.



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#### **NAT.GENIUS**

#### Luiz Ricardo Berezowski

Business Unit Sr. Manager luiz.ricardo@embraco.com

#### Antonio Amarante

Business Innovation Analyst antonio.amarante@embraco.com

#### Diego Ramos da Silva

New Business Development and Business Innovation Analyst diego.ramos@embraco.com

#### SINCTRONICS

**Carlos Ohde** Sr. Director, Innovation and New Ventures carlos.ohde@sinctronics.com.br

#### Bruno Morasi

Sr. Business Analyst bruno.morasi@sinctronics.com.br

#### HP

Eduardo Cherbino Strategic Procurement Manager eduardo.cherbino@hp.com

#### **UNIVERSITY OF SÃO PAULO**

Aldo Ometto Associate Professor aometto@sc.usp.br

Yovana Scavedra Postdoctoral Researcher ybarrera@sc.usp.br





## TARKETT

**Priscila Santos** Quality Engineer

priscila.santos@tarkett.com

#### NATURA

Sergio Talocchi Environment Manager sergiotalocchi@natura.net

#### WHAT CIRCULAR ECONOMY CHALLENGE DID THE CO.PROJECT SEEK TO ADDRESS?

This Co.Project came together with the intent to boost remanufacturing activities across the Brazilian industry, by showcasing opportunities to capture additional business value and overcome technical and economic challenges in dealing with material flows in the technical cycle.

## WHAT WAS IN SCOPE OF THE CO.PROJECT?

Brazilian manufacturers are increasingly seeking opportunities to capture additional value from their products and materials, moving towards the inner loop strategies of the circular economy system diagram. This Co.Project aimed to enable this movement through a two-phase strategy. Firstly, by carrying out a series of collaboration pilots to generate learnings and insights for future ventures and, subsequently, by creating a platform to scale the sharing of materials and intelligence in Brazilian industry, for a more systemic approach.

# WHAT WERE THE CO.PROJECT OUTCOMES?

In this first phase of the Co.Project, the team developed a series of prototypes where they collaborated to leverage the shared materials and remanufacture experience and knowledge between them. Examples include a pilot where discarded refrigerator rubber lining from Embraco was incorporated as input to Tarkett's vinyl flooring solution; an HP printer using 100% recycled plastic resin from Sinctronics; the incorporation of Sinctronics glass into Natura's perfume recipients; the insertion of Sinctronics' PVC wire coating into Tarkett's flooring solutions; and the use of Sinctronics recycled plastic by Nat.Genius.

### MAIN CHALLENGES AND KEY LEARNINGS:

- The first round of prototypes suggests that there are great opportunities to capture additional value from products, parts and materials after their first use, and to keep them circulating in the economy by matching existing supply and demand in the Brazilian market
- It also indicates an openness to collaborate in developing these solutions and sharing challenges and learnings
- Incorporating an element of academic research and benchmarking in parallel to the prototyping process could speed up the iterations in pursuing economic and technical viability of the different products and solutions
- Incorporating the principles of a circular economy in the material selection and design stage of products could enable additional value recovery opportunities down the line
- Engaging companies' commercial departments is a challenge, in terms of diversifying the supplier portfolio versus using pre-established relationships for sourcing virgin materials
- Brazil's current policy and fiscal frameworks are largely linear and pose a challenge for implementing such initiatives





### NEXT STEPS FOR CO.PROJECT MEMBERS

- Co.Project members will share their top priorities and challenges with the University of São Paulo team, who are to scale engagement in the project and become a valuable knowledge asset for addressing some of the challenges encountered and identifying additional value capture opportunities
- Having concluded the first phase of the Co.Project, mostly focused on prototyping, the team will now look at potentially developing a more systemwide and knowledge-based solution for gathering and sharing materials and expertise in order to capture additional value from products, parts and materials using circular strategies

#### WHAT NEXT RESEARCH QUESTIONS OR EXPLORATION TOPICS HAVE EMERGED FROM THIS CO.PROJECT?

Learnings from the first phase of the Co.Project have brought to light the importance of carrying out research on the design, legal and fiscal implications of such activities in Brazil, as well as mapping related success stories that can provide relevant learnings to be incorporated.

## TO FIND OUT MORE, PLEASE CONTACT:

Victoria Almeida

Brazil Associate victoria.almeida@ellenmacarthurfoundation.org





#### **ELLEN MACARTHUR FOUNDATION**

The Ellen MacArthur Foundation was created in 2010 to accelerate the transition to a circular economy. The Foundation works across five areas: insight and analysis, business and government. education and training, systemic initiatives and communication. In its business and government programme, the Foundation collaborates with its Global Partners (Danone, Google, H&M, Intesa Sanpaolo, Nike, Philips, Renault, Solvay, Unilever), Core Philanthropic Partners (SUN, MAVA, players of People's Postcode Lottery) and its CE100 network (businesses, universities, emerging innovators, governments, cities, affiliate organisations) to build capacity, explore collaboration opportunities and develop circular business initiatives.

#### **CE100**

The Circular Economy 100 is a precompetitive innovation programme established to enable organisations to develop new opportunities and realise their circular economy ambitions faster. It brings together corporates, governments and cities, academic institutions, emerging innovators and affiliates in a unique multi-stakeholder platform. Specially developed programme elements help members learn, build capacity, network and collaborate with key organisations around the circular economy.

#### ABOUT COLLABORATIVE PROJECTS (CO.PROJECTS)

Co.Projects are opportunities for formal precompetitive collaboration between CE100 members. They are driven by members, for members and their focus can range from research initiatives to pilots to toolkits. Co.Projects leverage the CE100 network with the aim of exploring opportunities and overcoming challenges which are commonly and collectively faced by organisations making the transition to a circular economy, and which organisations may not be able to address in isolation.



