

## AN EXPLORATION OF STAKEHOLDER COGNITIVE BIASES HINDERING CIRCULAR ECONOMY IMPLEMENTATION

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### ABSTRACT

The prevailing "take-make-waste" linear business model is significantly contributing to a surge in waste production and resource depletion (Preston, 2012). This pressing concern has amplified global interest in transitioning towards a circular economy (CE), which is conceptualized as a regenerative and restorative economic system (Ghisellini et al., 2016). The CE advocates the shift towards resource reduction, reuse, and recycling to minimize waste and maximize efficiency (Ellen MacArthur Foundation, 2022), offering a novel approach to tackling sustainability challenges (Zhang et al., 2019). Specifically, moving to a circular model requires a profound transformation that transcends the company's boundaries, encompassing the entire ecosystem where stakeholders and business organizations are interlinked to pursue economic, social, and environmental goals (Aarikka-Stenroos et al., 2023).

Despite acknowledging this, the CE scholarship has been mostly focused on inquiring challenges and limitations of CE concerning the ecological sphere and has failed to comprehensively address how social dynamics and stakeholder interests, values, expectations, and perceptions can support or hinder CE, overlooking the role of human behavior (Beaurain et al., 2023; Murray et al., 2017; Korhonen et al., 2018 Souza Piao et al., 2024). In this sense, while studies about technological, economic, and legislative barriers prevail, the exploration of stakeholder cognitive biases as impediments in the transition to CE remains scant (Cristofaro et al., 2023).

Hence, this study aims to provide a broader understanding of the phenomenon by exploring the different perspectives of various internal and external stakeholders on inaction in the circular economy. In other words, circular projects have an impact on the environment and society but to guarantee their success, the precondition is that these projects are supported by various stakeholders. However, stakeholders often overlook and neglect circular economy projects and our research question arises spontaneously: which specific cognitive biases affect the stakeholders' decision to engage in circular economy projects?

To address our research question we rely on a qualitative methodology that includes interviews with: a) managers of companies that have adopted circular business models; b) managers of companies involved in circular economy projects; c) stakeholders (such as customers, NGOs, suppliers, and

others) who actively or passively participate in circular economy projects. The data will be analyzed using the Gioia method (Gioia et al., 2013), aiming to identify recurrent patterns and build theory through 1st and 2nd order and aggregate dimensions.

We structured the questions based on the literature background of cognitive biases in environmental sustainability decisions (Palmucci and Ferraris, 2023), which we applied and adjusted to CE decision-making.

For instance, Tversky and Kahneman's Heuristics and biases approach to human judgment argues that people, in conditions of uncertainty and under pressure, typically use cognitive shortcuts that make probability assessments easy, but prone to error (Griffin, Gonzalez and Varey, 2001). To provide a few examples, some of the most analyzed biases in the literature are the *status quo* bias (Palmucci, 2023) and the *temporal discounting* (Palmucci and Ferraris, 2023). The former explains individuals' preference for maintaining the current state due to perceiving any change as a loss (Weber and Johnson, 2015). The latter refers to the tendency to undervalue future outcomes favoring immediate gratification over long-term benefits (Mazutis and Eckardt, 2017). With specific reference to environmental sustainability decisions, several studies demonstrate that cognitive biases influence these types of choices as well (Hoffman and Bazerman, 2007), reducing the likelihood that people act in favor of the environment (Palmucci and Ferraris, 2023). To make a few examples with the two biases described above (status quo and temporal discounting), the first will result in a tendency to keep adopting the same practices rather than embarking on new paths and investing in innovative environmental sustainability projects (Singh and Ryvola, 2018). The second will refer to a tendency not to consider the long-term returns of active investments to prevent climate change or, even worse, the tendency not to consider the long-term negative consequences of unsustainable behavior because "far away in the future and thus not relevant" (Shu and Bazerman, 2010). The results reveal that the primary bias hindering the successful implementation of CE practices is the temporal discounting bias. Specifically, some companies favor traditional and short-term investments over CE longer-term investments. This preference is influenced by the perception that consumers are not well-informed about CE products and are reluctant to purchase them due to their high prices. Overall, our paper enriches the literature on circular economy and circular business models through a stakeholder perspective (Beaurain et al., 2023; Murray et al., 2017; Korhonen et al., 2018; Souza Piao et al., 2024), providing evidence and discussing the key role of stakeholder cognitive biases in hindering CE projects implementation and success.

*Keywords: Circular Economy; Sustainability; Cognitive bias; Barriers, Stakeholders*

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