# Study analyzes how the green transition affects competition and concentration in the business market

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The green transition towards a more sustainable and environmentally

friendly economy has become a necessity to combat climate change, the scarcity of resources, and pollution. Businesses have been forced to shift from traditional fossil fuels to renewable energy sources.

But how does this transformation affect the market and competition between companies? A study conducted by a research group at the URV has sought answers to this question and has highlighted the need for immediate action in environmental policies so that the transition is complete and there are no environmental risks, company monopolies, or lack of investment.

The study, which has been published in the *Journal of Cleaner Production*, developed a theoretical model of competition that considered three possible scenarios during the green transition.

In the first scenario, companies do not make investments in more sustainable processes; instead, they perpetuate the production of materials that are toxic to the environment. The second scenario proposes a partial transition, in which half of the companies invest in the green transition while the other half maintains conventional production processes. Finally, in the third scenario, all companies invest in green transition and emission-free production.

The first two scenarios raise concerns about possible market concentration and reduced competition.

The study warns of the urgency of mitigating the environmental and economic risks associated with the trade-offs in the first two scenarios. Moving towards more sustainable production systems involves high costs for the industry, and this is the main reason why so few companies are committed to switching to sustainable processes, according to the theoretical model.

The paper also finds that price increases are inevitable during the green transition process. This is due to the changes required in production practices and the costs associated with the implementation of more environmentally friendly technologies and materials.

The research team points out that this scenario exacerbates the price increase. The reason for this is vertical differentiation, which implies that the green leader, who has made the transition, enjoys a competitive advantage because it gains a leading position as an early adopter of environmentally beneficial practices. In the long run, moreover, the "green leader" can perpetuate that advantage into some form of monopoly or market power.

The study also notes that, although prices are higher in the scenario that assumes that all companies make the green transition, this is the scenario that brings the maximum overall benefit.

"In this case, because of their environmental concerns, consumers are willing to pay a higher price for environmentally friendly products. Despite the higher cost, consumers' environmental satisfaction raises their overall benefit in this situation," says António Osório, a researcher in the URV's Department of Economics, who led the research.

In short, although price increases are inevitable during the green transition, the choice of business strategies and the response of consumers can significantly influence overall profit and, therefore, the final outcome of the transition to more sustainable practices.

**More information:** António Osório, Not everything is green in the green transition: Theoretical considerations on market structure, prices and competition, *Journal of Cleaner Production* (2023). DOI: 10.1016/j.jclepro.2023.139300

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